

**Major Applied Research Paper No. 9**

**FACTORS AFFECTING THE DEVELOPMENT  
OF PRIVATE HEALTH CARE PROVISION  
IN DEVELOPING COUNTRIES**

**Phase I:  
Review of Concepts and Literature,  
and Preliminary Field Design**

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## ABSTRACT

Privatizing existing public health care services and enhancing development of private health care provision are two of the main health policy innovations being promoted throughout the developing world since the 1980s. However, little is known about health care privatization. This paper analyzes the development of the private health care sector in the developing world, outlining what is known about the development of the private sector in developing countries and the major components of a conceptual framework that can be used to address these issues in future research. Included is a typology of private health care providers that is based on variation in organizational form and other characteristics, such as economic or commercial orientation, and therapeutic system. Major regional patterns are summarized and some of the important factors determining them are highlighted. Case studies of four countries—Papua New Guinea, the Republic of South Africa, Chile, and the United Kingdom—are included.

Key factors that influence the demand of private health care include income, price, quality, private and social insurance, transport infrastructure, the structure of the medical referral system, demographic and epidemiological factors, education and cultural factors, health-seeking behavior, and previous historical experience. Key factors that influence the supply of private health care is determined by demand, availability of inputs—which include medical labor, capital, and medical technology—and by the impact of insurance mechanisms on the nature of competition in the market for health care services. Governments critically influence the development of private health care provision—either directly through effects on the general social and macroeconomic environment, or directly through specific interventions. Government actions can be divided into those that affect the demand side or the supply side and can be further categorized as public provision or production, economic incentives or disincentives, regulation and licensing, interventions in factor or input markets, and public information.

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## LIST OF ACRONYMS

BUPA	British United Provident Association
CBHI	Central Bureau of Health Intelligence
FONASA	National Health Fund (Chile)
GDP	Gross Domestic Product
GNP	Gross National Product
GP	General Practitioner
HFS	Health Financing and Sustainability Project
HMO	Health Maintenance Organization
ILO	International Labor Organization
ISAPRE	Health Insurance Institution (Chile)
MOH	Ministry of Health
NGO	Nongovernmental Organization
NHI	National Health Insurance
NHS	National Health Service
NSS	National Sample Survey
OECD	Organisation for Economic Cooperation and Development
PNG	Papua New Guinea
PPP	Private Patient Plan
RAMS	Representative Association of Medical Schemes
RSA	Republic of South Africa
SERMENA	National Health Service for Employees (Chile)
SNS	National Health Service (Chile)
SNSS	National Health Service System (Chile)
TBA	Traditional Birth Attendants
UCC	Unusual and Customary Charges
UK	United Kingdom
USAID	United States Agency for International Development
WHO	World Health Organization
WPA	Western Provident Association

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## EXECUTIVE SUMMARY

Encouraging the development of the private health care sector is a major health policy reform being promoted in the developing world. Despite this, we know surprisingly little about the existing size and composition of the private health care sector in most developing countries, the factors shaping its development, and the possible policy interventions that can influence it.

In most countries, private expenditures comprise the bulk of total spending on health. Much less is known about the extent of private provision across countries. This paper defines the private provision sector as those providers outside of the control of the state. The sector is highly heterogeneous, and so its different forms must be classified further before it can be analyzed. The paper outlines a typology of private health care providers, on the basis of variation in organizational form and other characteristics, such as economic or commercial orientation, and therapeutic system.

For historical and institutional reasons, the patterns of private health care provision differ significantly across regions. In this paper, major regional patterns are summarized and some of the important factors determining them are highlighted.

Developing informed policies toward the private health care sector requires an understanding of the factors that influence its evolution. These factors can be divided on the basis of whether they determine the demand for or supply of private health services. On the demand side they include income, price, quality, private and social insurance, transport infrastructure, the structure of the medical referral system, demographic and epidemiological factors, education and cultural factors, health-seeking behavior, and previous historical experience. The supply of private services is determined not only by demand, but also by the availability of inputs, which include medical labor, capital, and medical technology, and by the impact of insurance mechanisms on the nature of competition in the market for health care services. Each of these factors is reviewed in turn, with relevant experiences from developing countries summarized.

Governments critically influence the development of private health care provision either indirectly through effects on the general social and macroeconomic environment, or directly through specific interventions. There is little documented experience with different types of interventions in developing countries. This paper reviews these types of interventions and recommends a number of areas for possible action. Government actions can be divided into those that affect the demand side or the supply side and can be further categorized as follows:

- ▲ public provision or production
- ▲ economic incentives or disincentives
- ▲ regulation and licensing
- ▲ interventions in factor or input markets
- ▲ public information

Empirical analysis of the determinants of private sector development is rare in developing countries. This paper presents an exploratory analysis of



cross-sectional data from Indian states, which suggests that public and private hospital provision are substitutes. However, general public health expenditure seems to have a positive correlation with private hospital development. These preliminary findings at least confirm the potential for identifying policy-relevant variables affecting private provision.

This paper also includes four country case studies, in the appendices, and an extensive bibliography.

## 1.0 INTRODUCTION

Privatizing existing public services and enhancing development of private health care provision are two of the main health policy innovations being promoted throughout the developing world since the 1980s. These innovations remain controversial, since private, and especially for-profit, health care arouses conflicting views concerning equity, efficiency, and ethics.

Despite many recent official efforts to promote private health care sector development, it is surprising how little is known about the size and composition of this sector in many countries. Even a cursory look at recent compilations of national health expenditure data (e.g., Griffin, 1992; Vogel, 1989; World Bank, 1993) suggests that many countries are already well advanced in "privatization," in the sense that the private health expenditures make up the majority of health spending and may be growing more rapidly than public expenditures. Of course, expenditure is not the same as provision. To date, no sizable cross-section database on private provision of health care has been developed, so little can be said about the degree of private activities in terms of health care workers or facilities.

Most higher income countries rely on various forms of private provision of health care, although financing may be dominated or at least heavily regulated by the public sector. In poorer countries, the link between private provision and expenditures may be stronger, since most of those countries lack a high degree of social financing of health care.

There is a rich literature on the responses of providers and users to economic incentives of different kinds, which has provided much insight into how the private medical care market functions. However, this literature usually addresses short-term responses of providers and users to changes in their environment. It usually doesn't answer such questions as, how did the private health care sector develop over the longer term? What factors shaped its growth? And what role did public policy and action play in this process?

Comparative studies of health systems in developed countries have shed some light on these questions. The recent work by the Organisation for Economic Co-operation and Development (OECD) has provided a quantitative database for exploring some of these dynamics for countries that, with a few exceptions, share major cultural and intellectual traditions. However, to date, similar comparative work for lower income countries has been limited and seriously constrained by data problems.

This Phase I Applied Research paper examines the factors determining the growth and composition of private health care provision. It is exploratory in nature. We seek to outline what is known about the development of the private sector in developing countries and the major components of a conceptual framework for addressing these issues in future research. Our approach is narrative and investigative, not deterministic and quantitative.

In this section of the paper, we discuss the term "private health care sector" and "public health care sector," and give a working definition for those terms as they are used in the paper. Section 3.0 provides a typology for investigating private provision of health care, mainly in developing countries. This typology could be used to organize future data collection on private provision. In Section 4.0, we discuss the wide range of experiences in the development of private health care in different regions of the world and present a regional typology for the purposes of analysis. In Section 5.0, we discuss in some detail a wide variety of demand- and supply-related factors that influence the growth and composition of private provision of health care. In Section 6.0, we discuss areas of possible government intervention in the growth and development of private health care services. In Section 7.0, we conclude with a brief explanation of the variation in private sector activity within one country—India. The appendices are brief case studies of the development of private provision in five countries: Papua New Guinea, South Africa, Chile, India, and the United Kingdom. These are presented for the sake of interest as examples of the great variety of experiences that exist in different countries, not as cases representative of some common international experience.

## 2.0 DEFINING "PRIVATE HEALTH CARE PROVISION"

### 2.1 Overview

The terms "public health care sector" and "private health care sector" have often been used without clear definition and delimitation. The initial point of definition is the distinction between "public" and "private." "Public sector" refers to activities of government at various levels, or of agents whose actions are wholly or principally determined by governments, such as government-owned companies. Since governments act as agents for the citizens of a society, their actions should be significantly motivated by some broader social objective or goal and typically involve access to some special rights and powers not available to other entities, such as the power to tax. "Private sector" refers to the activities of nongovernmental entities, including individuals, households, corporations, and nonprofit bodies. These entities are expected to be principally motivated by their own individual interests (e.g., profit, in the case of firms, and utility, for individuals) rather than some broader social objective.

The public and private dimensions of the health care sector are commonly further disaggregated by the distinction between public and private financing and provision of health care. That is, the public (private) health care sector could be defined to include either those things that the public (private) entities pay for in health care or the actual provision of health services by public (private) entities. This definition is the basis for the 2 x 2 matrix shown in Figure 1.1, which contrasts public and private financing and provision in the different cells. However, this can lead to some confusion when one uses the term "private health care sector" is used. The implications are clear for the two cells where both financing and provision are wholly public or private. On the other hand, how should the cells with mixed financing and/or provision be characterized: public or private sector?

We have concluded that efforts to delimit the "private health care sector" should clearly distinguish between the financing and provision functions and not attempt to combine them in a single category. Our focus in this paper is on *private provision*. Financing, both public and private, is an important determinant of private provision, as will be discussed in some detail below. A useful definition of the private provision sector would be one based on that presented by Bennett (1991) at a recent World Health Organization (WHO) meeting (1991, 5). The private health care provision sector can be defined as including those health care providers—organizations and individuals—working (i.e., providing care) outside the direct control of the state.

Disaggregating further the usual 2 x 2 matrix helps clarify this definition, as illustrated in the lower part of Figure 1.1. This further disassembling retains the distinction between public and private financing and provision, but bases the definition of private health care provision on the degree of state control. Six commonly found variations (A through F in the figure) can be identified, of which four occur in the areas with a mixture of public and private activity in financing and provision. In addition, there are two "empty" cells, where publicly financed and provided services would be

termed "private sector" or privately financed and provided services would be termed "public sector."

**FIGURE 1.1: A CONCEPTUAL VIEW OF PUBLIC AND PRIVATE SECTORS**

A 2 X 2 matrix showing the potential mix of public and private financing and provision

*PUBLIC FINANCING*

*PRIVATE FINANCING*

	<i>PUBLIC PROVISION</i>	<i>PRIVATE PROVISION</i>
<i>PUBLIC FINANCING</i>	<b>PUBLIC SECTOR</b>	<b>?</b>
<i>PRIVATE FINANCING</i>	<b>?</b>	<b>PRIVATE SECTOR</b>

**PUBLIC PROVISION**

Public financing

Private financing

**PRIVATE PROVISION**

Public financing

Private financing

	<b>PUBLIC PROVISION SECTOR</b>	<b>PRIVATE PROVISION SECTOR</b>
<b>PUBLIC FINANCING</b>	<b>A</b>	
<b>PRIVATE FINANCING</b>	<b>B</b>	<b>D</b>
	<b>C</b>	<b>E</b>
		<b>F</b>

## 2.2 Variations in Health Care Financing and Provision

### 2.2.1 Public Provision—Private Financing

Cells B and D represent public provision and private financing. This is a common pattern, typified by the charging of user fees in the public health system. In most cases, this can be regarded as still being public sector provision, and thus falls into area B. However, there are certain instances in which such services should be regarded as private sector provision, and thus functionally fall into area D. In many, if not most, developing countries, individual providers in the public sector will often see patients on an informal private basis after hours or even during the day at an official public health care facility, for the payment of usually illegal fees. Although some might argue that this is an extension of public sector user charges and hence represents public provision, the relationship between provider and client is essentially private, and we would place this type of services in the private provision category. (This topic is covered by Ellis and Chawla [1993] and so will not be discussed in further detail in this paper.) In effect, government employees are acting in a private role. Thus, in many developing countries a part of what appears to be public provision should probably be classified as private provision. This hidden private activity is difficult to measure and its importance in terms of quantity is unknown, although there is reason to think it is quite large in some countries.

A different situation is where the public system provides an alternative to its usual free or subsidized care, in the form of higher priced (and theoretically less subsidized) care in somewhat separate and parallel facilities, although this usually means different wards in the same hospital. This can be regarded as essentially a form of public sector price discrimination, and these services as being public provision. This type of organization engenders confusion when the degree of self-financing is high, the extent of administrative oversight and control by public sector authorities is slight, and the behavior of such parallel units is influenced predominantly by the individual personnel in such a manner that it differs little from that of private providers. Parastatal units may have a particular tendency towards this, especially if they have substantial autonomy in accessing inputs and can retain much of any income generated. Nonetheless, a more explicit response to market forces by a provider organization does not necessarily constitute private provision. In most cases, such providers should be placed in area B.

### 2.2.2 Private Provision—Public Financing

The public financing of privately provided care is common in many countries. It is widespread in higher income countries with social insurance financing, in the form of public support given to enable the population to use private services. The other form of publicly financed private care does not involve insurance or third-party reimbursement mechanisms, but direct payments to private agents who are contracted to provide certain services on the public behalf. In both of these cases services can be regarded as private provision activities that fall into area E.

In contrast, the contracting out, by government, of ancillary and support services that do not involve direct patient treatment (e.g., hospital

management, cleaning, linen supply, or catering) should not be confused with private health care provision—it is essentially an efficiency measure to enhance public provision and thus belongs in the public provision category. Such contracting out is a form of intermediate input in the public supply of services, where the state, not the patient, is the consumer, and should be classified as being in area C.

A more confusing and common case, occurring in some countries, is that in which large direct public payments support private treatment facilities. In Sub-Saharan Africa, private facilities belonging to nongovernmental organizations (NGOs), usually mission hospitals, are often supported by a mixture of public and private grants. In many cases this is on a long-term and formal basis and is associated with considerable public regulation and control of their activities. In principle, these facilities should still be classified as private, i.e. in area E. However, some might view the degree of public control as so great that it is better to regard these facilities as being functionally government units, and thus lying in area C. An example of this is Papua New Guinea, which is discussed in Appendix A.

The definition of private health care provision used for this paper includes areas D, E, and F. As the preceding discussion illustrates, this definition relies to some extent on qualitative distinctions about which there could be some differences of opinion; we welcome further efforts to clarify this.



### 3.0 FRAMEWORK FOR A TYPOLOGY OF PRIVATE HEALTH CARE PROVIDERS

In the literature and in the debate on the role of private provision, specific types of providers have tended to be confused with all private provision. For example, in some countries in which there are significant numbers of traditional birth attendants (TBAs), public discussion of what is termed "private provision" may only be referring to the more formal scientific-based forms of provision. In other instances, references to "private health care" only refer to private hospitals and not to private primary care providers.

Conclusions are drawn from looking at only one type of provider and then generalized to all other types, without qualification (e.g., Roemer, 1984). Such generalizations can lead to faulty analysis and weak policy interventions. Policies concerning whole categories of what may be significant sources of private provision are not developed. Clearly the form, behavior, and policy significance of, and potential policy approaches to, different provider types do vary, and it is important to recognize this. Reaching predictive conclusions when dealing with all private providers may be difficult, but it may be easier to do so when data are available that are disaggregated according to the types of providers. More systematic classification of private provision would aid in collecting data and in making cross-national comparisons (see *Section 4.0*).

Therefore, to understand the development of private health care provision, it is important to have a typology of providers. This would aid in the collection of descriptive data. Developing such a typology must be an essential first step in most countries, before any policy-related analysis can be carried out. Unless what the existing private health care provision sector consists of is known, drawing any conclusions about its status and prospects with any confidence or reliability is impossible. Without such analysis, formulating policy in an informed manner would be difficult.

Specifically, a typology should aid segmentation of private health care markets into more homogeneous units for the purposes of both data collection and analysis. We propose such a typology based on variation in *organizational form* and *characteristics*. Individual providers are categorized by placing them along such a continuum of variation. Within similar categories, they will still differ from one another in several dimensions, the most important of which can be identified as being: economic or commercial orientation, and therapeutic system.

#### 3.1 A TYPOLOGY BASED ON ORGANIZATIONAL FORM

The key defining characteristic of a health care typology is organizational form. This refers to the size, internal structure, and functioning of a health care provider. Health care is delivered by a variety of providers ranging from the informal, part-time, individual practitioner to large multi-institutional corporations. Between these two extremes, organizational complexity and size increase. A simple division can be between individual practitioners providing ambulatory care either from home or a small clinic and larger formal institutions, such as hospitals providing largely inpatient care. In between are a whole range of intermediate forms, such as

the private practitioner clinic, with a few beds that are occasionally put to use.<sup>1</sup>

At present, any categorization of providers according to organizational form is tentative. The borders between different categories may have to be drawn differently in each country, not only because of variations in systems of health care provision, but also because of differences in the economic behavior of these systems. A single working definition to start with might involve the following categories: not-fully-qualified individual providers, qualified individual practitioners, group practices with or without inpatient facilities, first-level hospitals, and secondary or higher level referral hospitals. The following criteria would be useful in delineating these categories:

- ▲ Whether providing inpatient care or not
- ▲ Number of beds
- ▲ Whether providing preventive or promotive services
- ▲ Whether providing general medical care or specialized medical care
- ▲ Whether staffed by individual or multiple providers
- ▲ Whether ancillary services, such as diagnostic tests and drugs, are provided, and, if so, which ones

As an example of how this typology may be used for analysis, Figure 2.1 shows some of the differences that might be expected among three forms of providers at different points along the spectrum of increasing organizational size and complexity. The characteristics given for the three different examples are suggestive in nature; they are not meant to be definitive and are worthy of future empirical analysis. The variation in input requirements and output characteristics is important in understanding how changes in supply-related factors (*see below*) might affect private health care provision. The smaller providers will typically be restricted to primary health care, while larger hospitals may be involved in the whole range of care from primary to tertiary. In addition, the cost profiles, both start-up and recurrent, may differ greatly and result in quite different behaviors in the marketplace. Similarly, differences or changes in demand-related characteristics will interact with the composition of services. For example, expansion in the availability of insurance might tend to encourage expansion in private hospital services more than that in primary care services. Being systematic in defining provider units in terms of their size and complexity is important, as these factors are likely to be closely associated with their demand for inputs and their supply of services.

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<sup>1</sup> Cross-national comparisons of data on the number and composition of providers should always be done warily, as official definitions of what constitutes a clinic or hospital often vary between countries. For example, in India, private hospitals could include facilities of only 10 beds, whereas in Thailand, a minimum of 25 beds is required to be classified as a hospital. The former definition would include a large number of individual provider clinics or "nursing homes" as they are called, although these would be excluded from the latter definition.

**FIGURE 2.1: VARIATION IN ORGANIZATIONAL FORM AND CHARACTERISTICS OF PRIVATE HEALTH CARE PROVIDERS WITH THREE ILLUSTRATING EXAMPLES**

SMALL SIZE

LARGE SIZE

LOW COMPLEXITY

INDIVIDUAL PRACTITIONER

PRIVATE CLINIC

PRIVATE HOSPITAL

HIGH COMPLEXITY

Typical Profile:

Qualified Ayurvedic doctor with some years experience, working alone from roadside office

Three doctors working together in purpose built premises, with paramedical and administrative staff, and attached dispensary and small laboratory

150 bed facility, incorporated as a company, providing a full range of specialist medical services, both inpatient and outpatient.

CAPITAL INTENSITY	low	moderate	high	INPUTS
LABOR INTENSITY	high	high	moderate	
TECHNOLOGY INTENSITY	low	low / moderate	high	
MANAGEMENT	physician	physician	physicians / administrators	HEALTH INSURANCE
DEGREE INFLUENCED BY INSURANCE: EFFECT ON DEMAND	low	moderate	high	
AMBULATORY CARE	yes	yes	no / yes	DELIVERED OUTPUTS
INPATIENT CARE	no	yes / no	yes	
SPECIALIST CARE	no	no / yes	yes	
ECONOMIC ORIENTATION	Combination of commercial intent and social altruism	Generally commercially minded	Highly profit-orientated	
LEGAL STATUS	Formal	Formalized	Legal commercial entity	
THERAPEUTIC SYSTEM	Ayurvedic	Modern Scientific	Modern Scientific	

## 3.2 ECONOMIC OR COMMERCIAL ORIENTATION

Economic orientation refers to the objective function of the provider. Two major types are usually recognized: for-profit and not-for-profit. However, it is important to note that non-commercial factors may influence provider behavior.

### 3.2.1 For-Profit Orientation

Various models describing provider behavior have been developed, many of them concerning for-profit providers. Providers can be described as profit-maximizing "firms" seeking to achieve a level of output where the price of a service equals its marginal cost and efficient providers drive inefficient ones from the market. Alternatively, as utility-maximizing individuals, providers might seek to optimize some labor-leisure trade-off, still striving for efficiency in producing profit, but constrained by the value placed on leisure. Larger private for-profit facilities may have stockholders whose objectives for return on investment (e.g., short-run versus long-run goals) may affect firm behavior.

### 3.2.2 Not-for-Profit Orientation

The basic distinction between not-for-profit providers and others is the nondistribution of profits or surplus, i.e. the organization's financial surplus (profit to the for-profit firm) is not claimed by its owners (Folland et al., 1993, 352).

While the behavior of for-profit firms has been extensively modeled in the economic literature, economists have been increasingly interested in understanding the behavior of nonprofits and how it may differ from for-profits (Green, 1987, Folland et al., 1993, 351-377). Newhouse (1970) models nonprofits as utility maximizers, hospitals whose preferences (held by its administrators) are defined in terms of the quantity and quality services. In contrast, Pauly and Redisch (1973) model the dominant or decisive set of decisionmakers as the physician staff. The hospital acts as a "physician's cooperative," which tries to maximize the net average revenue per physician. Another approach has been that of Harris (1977), who proposes that the hospital is organizationally in effect two separate firms: the trustee-administrator group, which supplies inputs, and the physician staff, who act as demanders. These two groups are in a continuous state of conflict over the use of resources, in what he describes as a noncooperative oligopoly game. To date, this literature has been based almost entirely on analysis of U.S. institutions. It is unclear how applicable these models would be in developing countries. This remains an area for potential research.

### 3.2.3 Noncommercial Motivations

A different element of the economic orientation relates to the nature of the exchange or transaction between the provider and the patient. In a purely commercial transaction, a distinct commodity, service or procedure is exchanged for money. The expectations of both provider and patient may be clear and the transaction is, to a significant extent, comparable to other transactions in terms of money value. This type of transaction is the basis of economic analysis of demand. However, there are many types of departure from this model

commercial transaction. For example, the commodity to be purchased may not be a service or procedure. It could be the final curing of an illness or some less easily definable relationship between provider and patient, including aspects of the provider's role as agent for the patient. The transaction may involve forms of payment or exchange other than money.

This type of noncommercial economic orientation is common in developing countries. It can be associated with different provider types in the organizational typology. For example, informal practitioners, typically in the context of a noncash economy, will often provide services either without directly linked compensation or for nonmonetary payment.<sup>2</sup> They may lack formal training, and for many of them health care may not be their sole or major source of livelihood, although they may be the most important provider of health services to their community.

The nature of the "service" provided may not be fully analogous with a commodity we recognize in Western health care markets. To continue with the example of the TBA, observers have often assumed that the service for which compensation is provided is a kind of clinical assistance at birth. In India, careful research has shown that this part of the TBA's role is often less important than ritual duties related to removing the impure effects of childbirth in the home (Jeffery et al., 1989). In this sense, the services provided by the "modern" and the "traditional" midwife are not equivalent. The traditional practitioners' services may not be purchased in the way that drugs or foods are bought. Rather, gifts may be provided in exchange for them. Similar analogies can be found for illness care (Kleinman, 1980).

#### **3.2.4 Mixed Orientation**

Many variations in the mix of economic orientations for both provider motivation and patient perceptions can be found. Individual providers and small clinics, especially in rural areas, may be able to operate as monopolists, maximizing their returns through price discrimination or through fine variations in services and amenities (Berman et al., 1987 and 1989). In contrast, they may combine some aspects of highly commercial practice with social action to improve the health of the poor, as is sometimes found when physicians return to their home villages to practice or provide services to the poor for free.

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<sup>2</sup> This does not imply that the indigenous healer offering his services for free is a common phenomenon in traditional societies, as this would be wrong. This notion of traditional societies having free health care is, as Van der Geest (1992) notes, "usually the product of Western imagination." He points out that the extent of monetary transactions in even rural African societies is significant and also predates colonization. As an example, he cites Hours (1987), who recorded the following statements from patients of local healers in Cameroon: "They like money too much" and "They are too thirsty for money." Even in premonetary societies, traditional healers were almost always paid for their services, as Ofose-Amaah (1989) notes: "In the African traditional system, every community and family understood the need to compensate the providers of health and other services in some form." Free health care may in fact conflict with tradition, and can be seen as essentially a concept associated with modern health services provided by the public sector or NGOs.

At the other end of the spectrum, the for-profit, commercial health care organization existing in a relatively open market system may show many of the characteristics of a profit-maximizing firm. Even nonprofit, voluntary hospitals must ultimately seek to break even, and this may mean they differ little from for-profit facilities in their functioning, especially if they depend on cost recovery for their financing. In many other countries, nonprofit tax status can sometimes be used by hospitals that engage in what is essentially unrestrained profit-maximizing behavior (Bennett, 1991).

It must be noted that for-profit orientation is not a unique characteristic of the private sector. For example, parastatals involved in health care, such as some social insurance funds in Latin America or hospital corporations elsewhere, may behave identically to privately owned for-profit organizations, sometimes achieving even greater profitability. In China, publicly owned health facilities were instructed in 1981 to recover their nonstaff recurrent costs through user fees. This has induced them to operate in a manner similar to private for-profit institutions (World Bank, 1990, 114).

### 3.3 THERAPEUTIC SYSTEM

The health care given by private providers can be based on different medical paradigms or "therapeutic systems." There is not necessarily any intrinsic economic difference among the different forms of medicine practiced. The rapid expansion of traditional therapies being packaged and sold as western-style drugs (for example, Indonesia's *Jamu*, and *Ayurvedic* pills and tonics in India and in Western countries) provide evidence of the adaptability of traditional medicines to modern markets. However different systems of medicine are associated with different methods of delivery, practice, or personnel. Certain forms of private provision, often involving other systems of medicine, are ignored, or even officially excluded from policy analysis and data collection in many countries, because they are viewed as illegal, improper or simply irrelevant by the modern medical or bureaucratic establishment. It is therefore important for the purpose of analysis to have a typology that can take into account such variations.

"Western," "allopathic," "modern," "cosmopolitan," or "scientific" are terms often used to describe the dominant system of medical knowledge and practice in the West and in many other countries. The essential characteristic of such a system is that it based on a scientific approach. This can be contrasted with traditional or indigenous medical systems in many countries as well as with other types of systems that may not be, in any exact sense, indigenous.<sup>3</sup>

It is important to note that alternative therapeutic systems are not just a feature of developing countries, but are also quite widespread in

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<sup>3</sup> The terms describing modern scientific medicine are not really interchangeable and so may be misleading at times. For example, homeopathy, which is Western and cosmopolitan in origin, is not generally accepted as scientific or of proven efficaciousness. All of these terms are value-laden to some degree and none are entirely satisfactory either as description or category.

industrialized societies. They include such forms as chiropractic, osteopathy, and hypnotherapy. Some of these services may be provided by professional practitioners, but in general they are the preserve of the semiformal private sector. While they may be of diminishing importance in many developing countries, such services appear to be one component of the private sector that is showing consistent growth in the more developed countries (Grant, 1985).

Traditional or folk medicine is often provided outside the formal sector, and in many areas traditional providers will accept both delayed and nonmonetary payment (DeJong, 1991). While this situation makes analysis difficult, it also means that significant organized markets in such care may not exist. However, in many low-income countries this kind of private health service may be the only or predominant one available in rural areas. According to a 1978 WHO estimate, 75 per cent or more of the rural population in Africa had no available alternative to traditional practitioners (WHO, 1978).

There is much heterogeneity in the forms in which traditional medicine is practiced around the world. Many structured, ethnomedical systems exist, such as *Ayurveda* in India and traditional Chinese medicine. These are often highly institutionalized, with formal medical schools, hospitals, and regulatory arrangements. They can be provided in highly organized and commercial settings, together with advanced diagnostic facilities. Modern hospitals providing such care may behave just as any other for-profit hospital.

Such coherent systems are generally found only in Asia, and not in all Asian countries. Less formalized traditions are found elsewhere. However, even the informal and often noncommercial forms of traditional medical practice are not fixed and are liable to change under the impact of modernization. In many countries, traditional healers have slowly adopted the practices of modern medicine, including prescribing antibiotics and other cosmopolitan pharmaceuticals, wearing white coats, using modern diagnostic equipment and formal record systems, and operating from modern clinical facilities (DeJong, 1991, 8). These changes make analysis of traditional providers not only more important in looking at the private health care sector, but also result in more direct competition with modern health care providers. Cosmopolitan providers have also adopted traditional practices, as well as other forms of medical practice, in some countries. In Indonesia, the press has commented on the increasing number of *Terkun* practices (meaning *Doktor-Dukun*, *dukun* being the term for traditional practice) (Berman, 1993).

As a historical note, it should be remembered that the differences in practice between modern and traditional medicine are relatively recent, dating mainly from the later 19th century or even later in many countries. In Japan the transition to a system of modern medicine based on largely private practitioners was relatively smooth, precisely because of the very small differences in activity between cosmopolitan doctors and the already established indigenous healers (Ikegami, 1990, 1). Caldwell et al. (1989) have also noted from their work in Kerala and Sri Lanka that the transition to intensive usage of modern public and private services in both areas has been unusually fast, precisely because of the seriousness with which traditional medicine was previously taken.

### 3.4 TOWARDS A TYPOLOGY

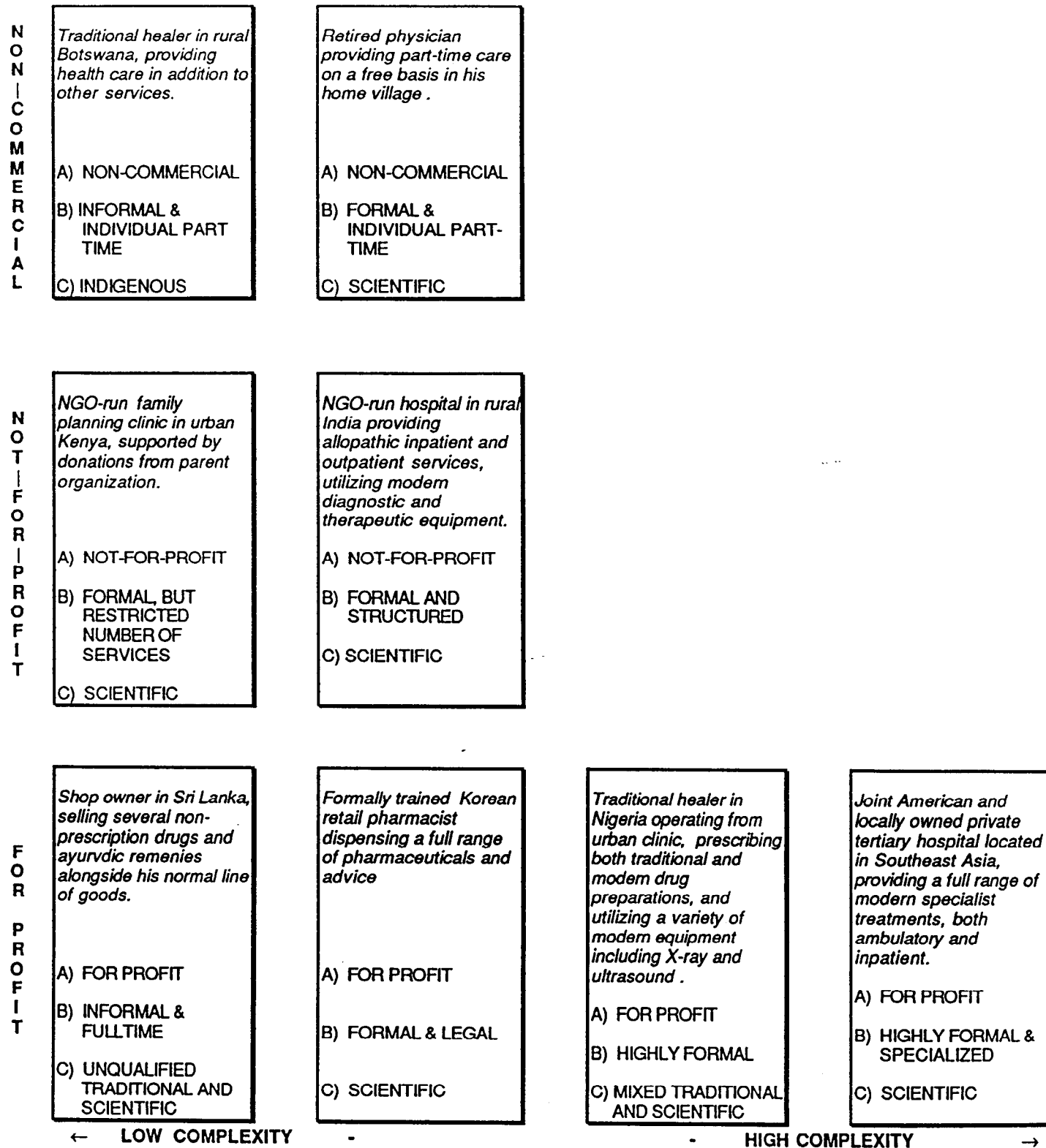
From the preceding discussion, it should be clear that the widespread use of the terms "private health care sector" and "private health care providers" mask considerable diversity in both form and content. Figure 2.2 illustrates the diversity of private health care providers that can be categorized using this typology, based on organizational form, economic orientation and therapeutic system.

At this time, little quantitative data exist describing the relative size of these different components of the private provision sector. This is an important area for future descriptive work and an essential precondition for analysis of how private provision has developed.

In the following section of this paper, we describe some of the major regional differences in the development of the private health care sector. However, such regional generalizations are no substitute for detailed country studies that both describe and enumerate the organizational forms of private health care and their main characteristics. Besides descriptive data, a much better understanding of behavioral factors in private provision is needed.



**FIGURE 2.2: SOME EXAMPLES ILLUSTRATING THE DIVERSITY OF PRIVATE HEALTH CARE PROVIDERS AND THEIR CHARACTERISTICS**



Note: The above are schematic examples given for the purposes of illustration and are not necessarily meant to refer to any particular factual providers. Each is categorized according to three dimensions of analysis: (A) ECONOMIC ORIENTATION; (B) ORGANIZATIONAL FORM; (C) THERAPEUTIC SYSTEM.

#### 4.0 REGIONAL DIFFERENCES IN PRIVATE HEALTH CARE PROVISION

While there are clearly factors that influence the development of private provision in all countries, there also appear to be sizable differences in the development of private provision in different parts of the world. The differences may reflect varied economic and social development and historical backgrounds in the different regions. Being aware of these patterns not only aids analysis of different countries, but also will help suggest where cross-national comparisons are least helpful.

The development of private health care services may follow different patterns, depending on the specific conditions in a country or a group of countries or region. The cases of South Africa (see *Appendix B and Thomson, 1984*) or Sri Lanka (Uragoda, 1987) suggest a pattern in which the first private providers consist of individual private practitioners, working by themselves in urban areas. Later, as demand increases, larger units, in most cases nursing or maternity homes, are established that can keep patients overnight. The next step is the establishment by physicians of larger hospitals that can undertake more specialized care, including operative and diagnostic interventions. With time, if the market increases sufficiently, there is gradual involvement of other investors and professional managers in the running and setting up of new facilities. This pattern can also be seen as a response to gaps in public investment programs. For example, in India (Jeffery et al., 1989) and Indonesia, governments initially established large public hospitals in urban areas and later developed extensive networks of primary care facilities.

Table 3.1 sketches major regional differences in the current patterns of private provision, historical background, type of medical systems, general socioeconomic background, and policy differences. This is not an attempt to comprehensively define all cross-national differences in health care systems, but to point to some general distinctive features that seem to be shared by many, if not all, countries in a particular region and that are of help in analyzing the condition of the private sector. The regions so identified are OECD, Latin America, the Caribbean, Sub-Saharan Africa, Middle East, South Asia, Southeast Asia and Eastern Europe and the former Soviet Union.

**TABLE 3.1: Regional Typology of Private Health Care Services**

CURRENT MAJOR PATTERN	HISTORICAL BACKGROUND	MEDICAL SYSTEMS	SOCIOECONOMIC ENVIRONMENT	POLICY DIFFERENCES
<b>OECD COUNTRIES</b>				
Varying mix of provision ranging from mostly private (Japan) to mostly public (UK, Scandinavia). Financing by social and public insurance; very limited private insurance (except in USA and Switzerland). Public expenditures as a share of total health expenditures generally high (70 - 95%) and rising.	Modern personal health services started in mid-19th century, mostly by private initiative. Initial developments were generally ambulatory, with some state provision of hospital care. With industrialization and economic growth, gradual expansion and shift to hospitals. Comprehensive, mostly private infrastructure established by 1930s. Incremental development of third party payment systems - a mix of social insurance and public financing, with limited private insurance - achieving universal coverage by 1950s and 60s.	Modern health care dominant. Traditional medical systems of little importance. Alternative therapeutic systems exist in the private sector and are flourishing. Reflects a demand for more holistic and personal care.	High income market economies. Moderate growth. Industrialized and heavily urbanized. High level of human resources.	Historically the political and social pressures have been for the expansion of health care availability to the whole population by public intervention. Major concerns are cost control and equity, leading to greater state control and regulation, eg: global budgets. Government role in financing dominates, with experimentation with increased competition in provision and widespread private ownership.
<b>LATIN AMERICA</b>				
Pluralistic mix of social insurance funds, public and private provision. Public and social insurance facilities predominate at hospital level and in rural areas. Insurance coverage varies, reaching 100% in some richer countries (Brazil). Public funding under considerable pressure during 1980s economic crisis. Recent expansion in private insurance in urban areas and in private tertiary facilities. Some experimentation with innovative financing mechanisms in some areas, including HMOs.	Historically treatment provided by traditional healers ( <i>curanderos</i> ). Religious and voluntary organizations established hospitals in urban areas during colonial rule. Social insurance funds covering workers - started after 1924 in all countries - typically built their own facilities. After WWII MOHs concentrated on PHC and serving remaining population, mostly rural. Parallel private sector, predominantly ambulatory and urban, always existed, with most physicians working in both sectors. Social insurance coverage gradually increasing, with the financing of private sector provision becoming more common.	Formal sector dominant, with modern medical care available to most of population. Traditional medicine has always existed, derived from indigenous Indian cultures. Now declining and restricted to underprovided rural areas. Does not appear to receive much institutional financing.	Low to middle income economies. Mixed, mostly poor growth during 80s, but better prospects in 90s. Moderate industrialization. Mostly urbanized. Moderate level of human resources.	Early approaches reflect Iberian traditions. Later emphasis on social insurance encouraged by ILO advice. Social insurance agencies have usually acquired considerable autonomy from MOHs. This has limited the deepening of insurance coverage and caused inequity in access to medical facilities. Some concern about cost escalation in recent years, but this is limited.
<b>CARRIBEAN</b>				
Government services predominant, especially at tertiary level. Private general practitioner services important for primary health care. Some private practice by government hospital specialists. Financing usually out-of-pocket, but private insurance schemes developing. Social insurance introduced in Barbados, with incorporation of GPs into public service.	Hospital-based public services established during colonial rule, financed from general revenues and generally free. MOHs active in public health functions. Private services typically limited to ambulatory formal and informal provision. Few attempts to introduce social insurance.	Significant systematized traditional medical systems absent, with exception of indigenous forms in Hispaniola. Health care predominantly modern, with some informal folk practices in rural areas.	Small, middle income economies, many microstates. Highly export and tourist dependent. Variable economic record, with some countries enjoying high and sustained growth. Some rural populations, but usually with access to urban facilities. High level of human resources.	Traditionally governments have regarded medical care as a merit good, requiring state provision, especially in English speaking islands. In recent years economic difficulties has resulted in more interest in private sector activity and possible partial privatization.

## SUB-SAHARAN AFRICA

Generally low level of government health service provision. Rural areas particularly underprovided. NGO sector makes a major contribution to health services provision, 25 - 50% in many cases, and often better distributed to underserved and rural areas. Traditional healers the major accessible source of care for many rural populations. Formal private services generally small, and restricted to urban areas. Little current expansion, because of lack of demand. Formal sector of workforce small, and insurance coverage very low. Shortages of personnel in many countries.	Publicly-provided modern health care services established during colonial rule, but restricted to urban and administrative elites. NGOs, originally religious missions, important in extending services to peripheral areas. Large parts of the rural population remained dependent on traditional providers. Alternative insurance-based services established in some countries, often for white settler populations. Resource constraints have prevented significant expansion in government services in recent decades.	Wide diversity of traditional medical systems, but no major systematized and organized forms. Generally not recognized or supported by governments, so almost exclusively in private sector. Widely available, and used in both rural and urban areas. Modern health care often hospital based and not accessible to everyone.	Heterogeneous group of economies but many low income. Poor growth with declines and considerable economic crisis in many countries. Little industrialization. Mostly rural populations, dependent on subsistence farming. Low level of human resources.	Initial policies following colonial period have been to expand free government services to whole population. In francophone Africa there has been more experiments with social insurance, but this has been more as a benefit for important groups. Government services now facing major resource constraints because of adverse macroeconomic conditions. Crisis is forcing consideration of alternatives, but there are difficulties with poor administrative infrastructure and human resources.
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## MIDDLE EAST

Public / private mix varies across countries, and corresponds to attitudes to private sector activity in general. A growing private ambulatory sector exists in all, but the extent of private hospital provision varies from little (Tunisia) to extensive (Egypt). Private sector shows considerable urban bias in all cases.	Approach to health care provision generally reflects overall economic strategies. Private provision has always been significant, but several countries have attempted to expand free government health services to whole population (Tunisia), while others have predominantly relied on the private sector (Jordan). Little experience with social insurance, except Lebanon and Jordan. Most have faced resource constraints, and private sector has generally filled gap. In recent years fiscal crisis has forced more attention to private sector development.	Some traditional medical systems, but these are of declining importance. Modern health care is generally available.	Range of low to middle income economies. Varied economic strategies: laissez-faire (Lebanon) to considerable state control (Tunisia, Syria). Several facing economic difficulties, and need for economic liberalization. Mixed growth. Moderate industrialization. Semi-urbanized populations. Moderate level of human resources.	Spectrum of policies. Private practice is always permitted. Little active support of the private sector, with some just ignoring it. Most countries have regulated prices and fee levels through administrative measures, but the ability to control the sector via insurance does not exist. Public intervention is usually limited to direct provision, and widespread insurance coverage has not often been a policy goal.
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## SOUTH ASIA

Rich diversity of providers. Significant public provision, especially in the hospital sector, but generally inadequate, particularly in rural areas. Large, widespread private sector consisting of formal and informal providers. Significant private hospital provision in urban areas. Some work-based social and private insurance, but restricted to formal sector in cities, and overall coverage still low.	A great diversity of providers has long existed. Colonial administrations established basic health services, located predominantly in urban areas. Governments have expanded these, but funding has generally been insufficient to meet demand. Considerable freedom for private sector activity, and no shortage of medical personnel. Formal private sector services have continually expanded at both primary and tertiary levels, and in urban and rural areas. Likely overprovision of ambulatory care and drugs for most of population, but with poor quality.	Modern health care widely available and predominant. But several formal and established systems of traditional medicine, including ayurveda, unani, etc. These are often professionalized, receiving official support and provided on a highly organized basis. Other systems also available, including homeopathy.	Low income economies. Moderate economic growth. Small, but growing industrial sector. Mostly rural. Moderate level of human resources, and ample supply of medical personnel.	
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## 5.0 FACTORS AFFECTING THE GROWTH AND COMPOSITION OF PRIVATE PROVISION IN DEVELOPING COUNTRIES

Private health care providers exist alongside public ones as both substitutes and complements to the available public provision. The relative role of each at any point in time varies considerably across countries and also within them. In some places, public sector provision is overwhelmingly predominant, while in others private providers play a greater role. In between many combinations of public-private mix can be found.

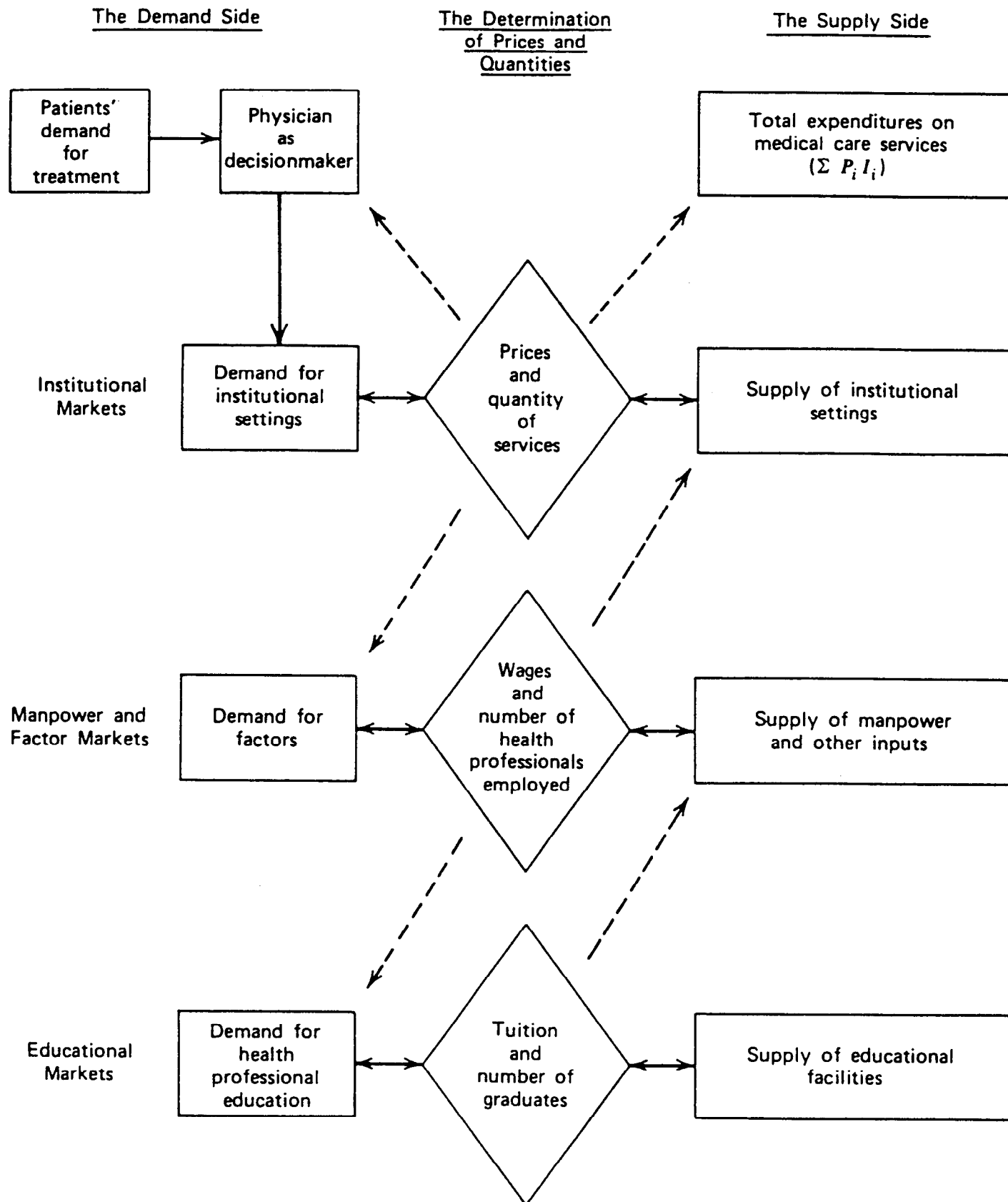
Each country's situation is the consequence of both its own particular historical and socioeconomic antecedents as well as the effects of recent market and nonmarket forces. This presents particular problems in performing comparative analysis and trying to develop generalizable knowledge about the factors affecting private sector growth. We have limited information about the factors that play a role, and their specific effects are confounded with each country's pre-existing conditions.

Market forces are significant determinants of the development of the private health care sector. The sector will, over the long run, reflect the movement towards equilibrium between the demand for private services and the supply factors influencing the way in which private providers meet such demand. However, there is ample evidence from the higher income countries that health care markets are far from perfect, both on the demand and supply sides (Barr, 1992). Also, the rate at which the supply and demand factors themselves change may be more rapid in developing countries than in developed countries, and so the position of the long-run equilibrium itself may change more rapidly.

In the following two sections, we describe the wide range of factors, both market and institutional, that could play an important role in determining the growth and composition of the private health provision in developing countries. Figure 4.1 presents a simple schematic model of the "medical care sector" from Feldstein's (1993, 38) *Health Care Economics*. This model links demand-related aspects on the left with the supply response on the right, through the central column in which prices and quantities are determined. This framework is demand driven, with the initial moving force, portrayed in the upper left hand corner as "patients' demand for treatment," leading to contact with a physician, who then, as the clinical decision-maker, provides the link for further derived demand for health care institutional settings, inputs, and personnel. These derived demands then contribute, along with their corresponding supply responses, to determining equilibrium prices and quantities.

**FIGURE 4.1: AN OVERVIEW OF THE MEDICAL CARE SECTOR**

Source: Feldstein (1993, 38)



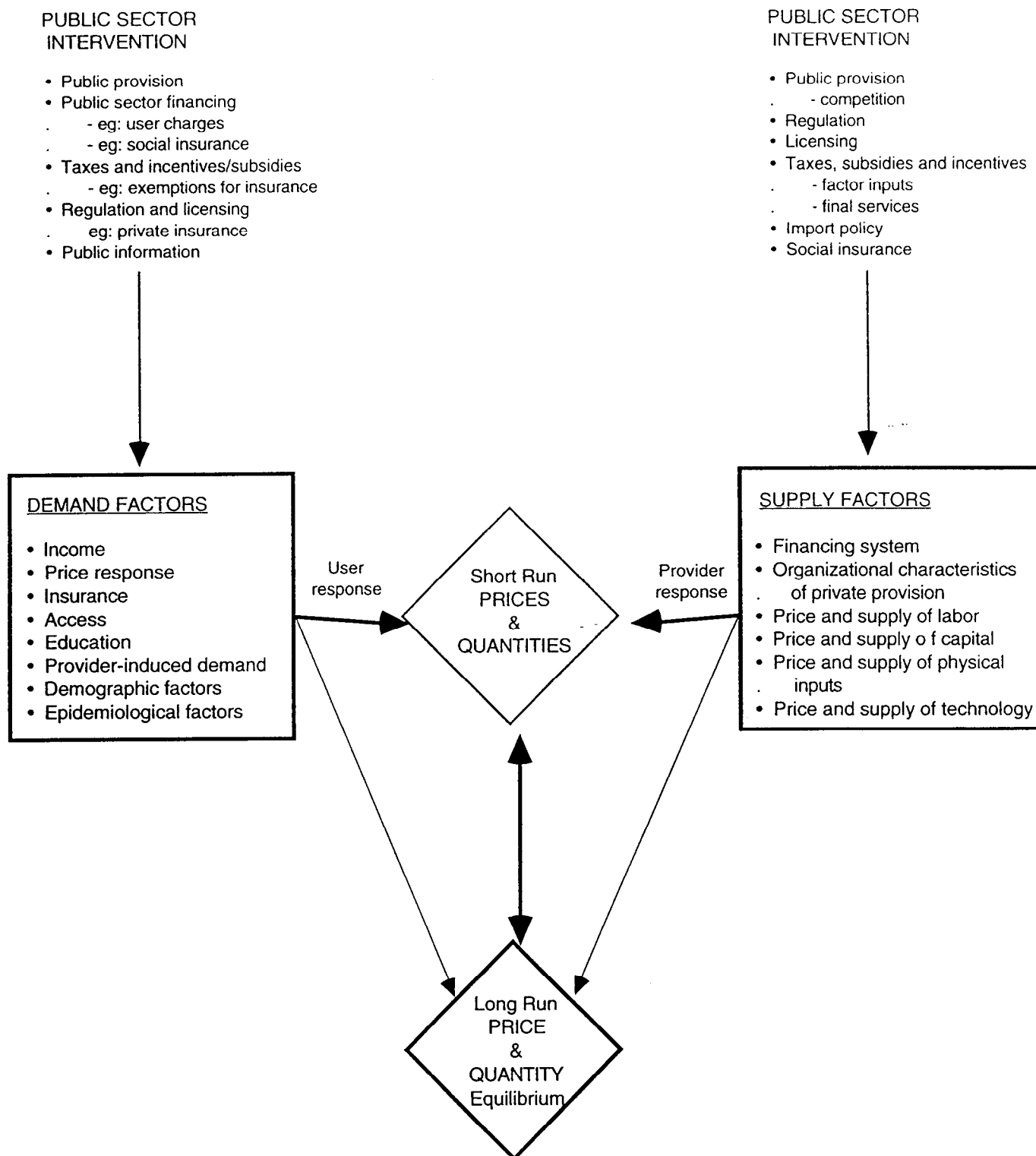
While this simple model can certainly be criticized, it is instructive as a basis for thinking about the determinants of private provider growth and composition. First, while Feldstein's model is demand driven and even initiated by a patient's first contact with a physician, it could easily accommodate other external influences at all levels, which would alter the equilibrium relationships. For example, as they do in many developing countries, patients could initiate their demand for treatment at the hospital. Alternatively, the price and quantity of physician services could be influenced by an exogenous increase in demand for medical education and consequent rise in the supply of doctors. Exogenous changes on the supply side could also be influential, for example, public construction of new hospital beds or subsidies for new technologies.

An analytical model of private health care provision for application in developing countries will have to include important aspects not explicitly presented in the Feldstein model: the role of government policy and public sector interventions, and the differing impacts in the short run and the long run of the supply and demand factors on the supply and composition of private sector health care provision.

A framework that does this is shown in Figure 4.2. The prices and quantities of private services provided are determined in the short run by the interaction between demand and supply factors. The latter in turn are subject to influence by government interventions. The same supply and demand factors, in addition to current prices, also influence the long run supply and composition of private services.



**FIGURE 4.2: DETERMINANTS OF THE SUPPLY AND COMPOSITION OF PRIVATE HEALTH CARE PROVISION IN DEVELOPING COUNTRIES**



Note that indirect public sector interventions are also important, but are not represented in this figure. They include such interventions as provision of primary schooling, construction of roads and communications, development of capital markets, etc. These act predominantly via the demand side.

## 5.1 DEMAND FACTORS

The demand for private services is derived from the overall demand for health services. For most individuals, the decision to seek care comes first followed by the choice, if any, of provider. There is little evidence to suggest that the typical consumer would choose a provider on the basis of ownership type, i.e., whether the provider is public or private. Demand theory and empirical research suggest that choices among provider types are based on such factors as expected benefit, price, opportunity cost, availability, and quality.

From this, it follows that the demand side determinants fall into two groups: those that influence the overall demand for health care and those that influence the choice of private over public providers.

### 5.1.1 Income and the Demand for Health Care

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#### ***Summary***

- ▲ **Real per capita income is the major determinant of total national health care expenditures.**
  - ▲ **National health expenditures are generally income elastic.**
  - ▲ **At any given income level, increases in public health expenditures will be associated with some tendency for reduced private spending, and vice versa.**
  - ▲ **The link between income and demand for private provision is complex and heavily influenced by the organization of health care financing.**
- 

Demand for private health care can be measured in terms of quantities of health care used, expenditures, or choice of providers. Analysis of quantities has rarely been done, while there is substantial empirical work on expenditures and choice.

Despite enormous diversity in the nature of national health care systems, including financing mechanisms, the major determinant of national health care expenditures is per capita income. (Both this and the following part of the discussion focus on the relationship between income and the demand for health care expressed in terms of expenditures. Examining demand as represented by quantities of medical care consumed would be more interesting; however, relatively little empirical work has been done in this area, and so little can be said conclusively at this stage.) Higher incomes are strongly associated with greater spending on medical care. This has been repeatedly shown in analyses of various sets of cross-national data (Abel-Smith, 1963, 1967; Newhouse, 1976; Maxwell, 1981; Getzen and Poullier, 1991). More sophisticated models incorporating income and inflation as lagged variables give even closer estimates of the actual values, confirming the fundamental

importance of macroeconomic variables in determining total health expenditures (Getzen, 1990).

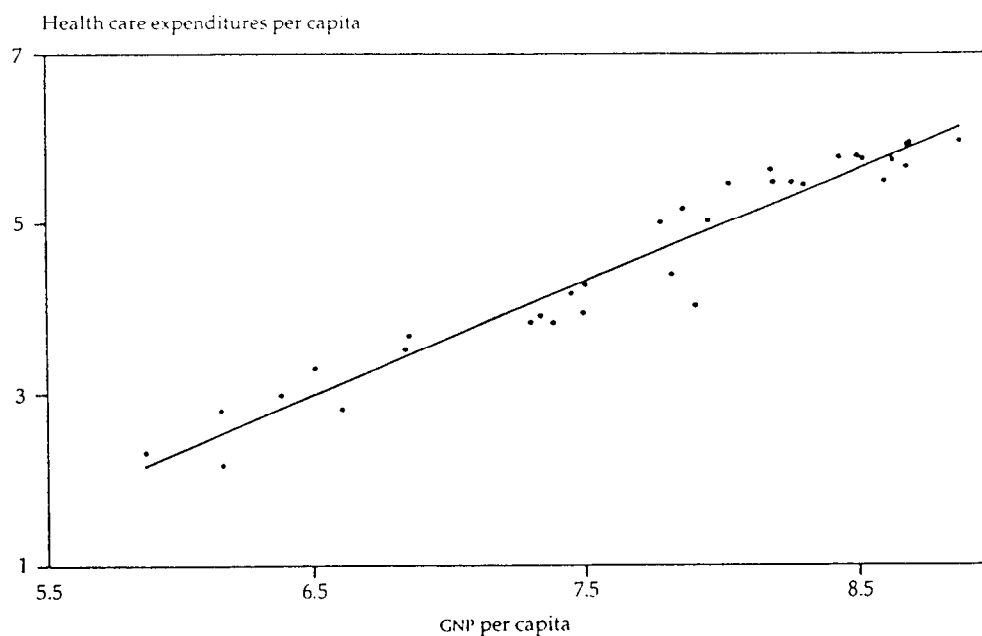
This relationship appears to hold for developing countries as well. Using 1982 data adjusted for purchasing power, Gertler and van der Gaag (1990) compared per capita health expenditures against real per capita income for a sample of 34 developing and developed countries. The double logarithmic Engel curve had an adjusted  $R^2$  of 0.94 and indicated an income elasticity of 1.329 (Figure 4.3). This is consistent with other studies that have estimated income elasticities of between 1.1 and 1.6.

The relationship between *private* health care expenditures and per capita income levels is unclear. As one example, Figure 4.4 shows the data for some Asian countries, suggesting little relationship. A broad cross-section of country data collected for the 1993 World Development Report suggests a negative relationship, with private expenditures declining at higher income levels. (As part of other work being carried out by Data for Decision Making, another U.S. Agency for International Development-funded project, the World Development Report database on private expenditures is being recompiled. Since analysis of this new database is not yet completed, it is not possible to incorporate the results of that analysis.) This negative relationship contrasts with the widespread perception of rapid growth in private health care accompanying economic development (Berman et al., 1989).

There may be several reasons for this discrepancy. Most importantly, these are data on *expenditures* and not on *provision*. Any correlation between the level of private provision and the level of private financing would not be expected. It is more likely to depend on the financing arrangements. In fact, analysis of what limited provision data is available suggests that there is no simple relationship among income, private financing, and provision (Data for Decision Making, n.d.). At higher income levels, countries institute social insurance schemes, with varying institutional arrangements in terms of government control. National health expenditure data are often not consistent in labeling these schemes as public or private. In fact, governments can quickly capture large parts of private expenditure through mandatory health insurance "contributions" (i.e., taxes) and make them into "public" sector expenditures, with little change in actual levels or patterns of spending. Private provision may increase proportionally at higher levels of income, even though private expenditures decline, if governments pay for private providers. This has been the experience in the United States. A broad cross-section of countries that includes the industrialized countries may also give a misleading picture of trends in the developing countries themselves, since the major institutional changes are clustered at the higher income levels.

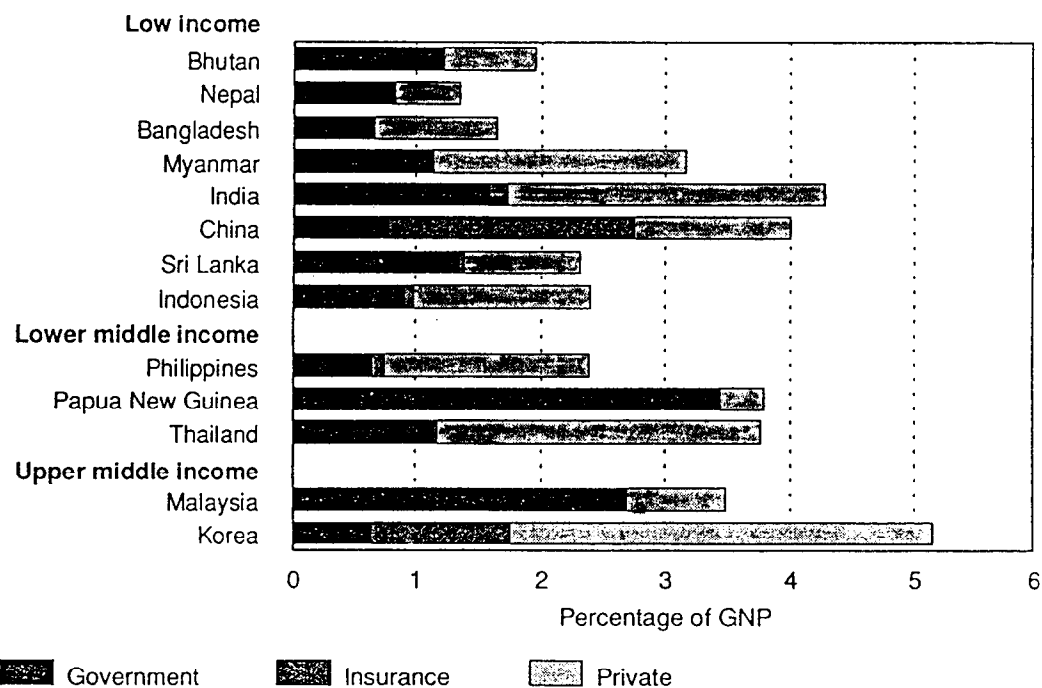
**FIGURE 4.3: HEALTH CARE EXPENDITURES AND GNP (IN LOGARITHMS)**

Source: Gertler and van der Gaag (1990)



**FIGURE 4.4: HEALTH EXPENDITURE BY SOURCE AS A PERCENTAGE OF GNP IN SELECTED COUNTRIES, MOST RECENT YEAR.**

Source: Griffin (1992, 52)



Note: The countries are arranged in order of increasing income per capita, with each group of countries representing about double the GNP per capita of the middle country of the group above it.

Secondly, the size and composition of government spending on health differs significantly across countries at similar levels of income. If private and government spending combine in some way to result in some "desired" level of spending for a country the variation in government contribution would weaken any link between income and private spending. Thirdly, private health expenditure data are often based on weak information with large errors, especially the data on developing countries (Rannan-Eliya and Berman, 1993).

Thus, at a national level the link between income growth and private health care is not clear statistically and is muddled by problems of definition and data. It can be concluded, however, that health care demand and income are closely linked, and that private health care will reflect the level of income and other local factors, although the exact relationships warrant further investigation. The structure of public sector financing and provision will be one of the most important of these local factors. If public spending does not keep pace with income growth (which means a rate greater than income growth), then the rate of growth in private health expenditures is likely to be higher than if public spending does not keep pace. If aggregate income growth is high, private sector expansion may be extremely rapid. Such income growth may be a major cause of the huge increase in the private sector in much of Southeast and East Asia in the 1980s.

The links between expenditure levels and the private sector role in health care provision are complex, and an international database on provision is not yet available. Certainly the structures of health care financing are important determinants of private provision. In addition, differences in health care organization, prices, and productivity among countries may add variability to the relationship among income, health expenditures, and the quantity of public and private provision (see Griffin, 1992a for some work on this subject in Asian countries). This is an area for future research.

#### 5.1.2 Income and the Individual Demand for Private Health Care

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##### **Summary**

- ▲ **The demand for medical care at the individual level is income elastic.**
  - ▲ **The choice of private over public medical care is positively linked to income in many countries for which empirical data is available.**
  - ▲ **More unequal income distribution may be associated with higher expenditures on private services.**
- 

Analyses based on national data may not adequately reflect the behavior of individuals or smaller levels of aggregation. In a situation where a mix of private and public medical services is available, the choice of private over public services might be expected to be highly income dependent. There is evidence that this is the case from many countries.

In a rare study based on household survey data, Musgrove (1983) examined family expenditures on health care in six Latin American countries during 1966-1975. The results confirmed that total health care spending is a normal good, with an income elasticity declining towards 1 for the higher income countries. Private care had a higher income elasticity than that provided by the public sector. This was hypothesized to show that private care is a luxury relative to public care and that consumption shifts from the latter to the former as income rises, other things being equal. Musgrove also noted in his analysis that the relative roles of private and public spending might vary greatly in response to regional differences and changing patterns of public provision.

Musgrove's study is also suggestive that increases in income will probably result in increased demand for, and thus supply of, private health care at the margin, both in relative and absolute terms. At low income levels the effect will probably be most apparent for cheaper items, such as drugs or ambulatory care, while at higher income levels the effect on hospital type care will be more pronounced.

Increases in income affecting only part of the population can also result in increases in demand by those segments. This suggests that if growth is skewed towards higher income groups, then the expansion in private services may be considerably exaggerated relative to national income levels, both in amount and, perhaps, also in terms of emphasis on more expensive items of care. Income distribution as well as income level may be a significant determinant of private health care sector growth. (This may be difficult to show empirically as accurate and comparable data on income distributions in many developing countries are generally difficult to obtain; in addition, income distribution may for reasons of political economy be an independent determinant of the level of public expenditures and provision, which in turn are determinants of the level of private sector activity.)

### 5.1.3 Price

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#### **Summary**

- ▲ **Demand for medical care responds to price differences, including both direct and indirect prices. Price elasticities are greater at lower incomes.**
  - ▲ **Private provision will be greater, *ceteris paribus*, where the ratio of public to private prices is higher (i.e., public sector prices are higher relative to private prices), with price including both monetary and non-monetary costs.**
  - ▲ **Increases in the price of publicly-provided care will increase the demand for private services, although it will also reduce overall demand.**
  - ▲ **Private providers may be more likely to price discriminate, enhancing demand for their services.**
- 

Price is a an important determinant of both the overall demand for health care and the choice of provider. Economic models in higher income countries generally find statistically significant price effects (Rosett and Huang, 1973; Davis and Russel, 1972; Phelps and Newhouse, 1974; Goldman and Grossman, 1978; Newhouse and Phelps, 1974 and 1976; Manning et al., 1987).

Gertler and van der Gaag (1990) argue that, on theoretical grounds, price is expected to be a more important factor in developing countries. Using data gathered in Côte d'Ivoire and Peru, they showed that demand for medical care was significantly price sensitive. Price elasticities also varied as expected with income, being greater at low incomes. (A number of earlier studies in developing countries showed significantly negative but relatively low price elasticities of demand (Heller, 1982; Akin et al., 1985 and 1986; Schwartz et al., 1988; Birdsall and Chuhan, 1986), a finding that was reflected in some policy documents (World Bank, 1987). However, these studies used different specifications and did not test for price elasticities by income group.)

The *choice* of provider is influenced by the difference in prices between comparable alternatives. Cross-price elasticities measure the change in demand for one type of provider with a change in price of another type of provider. Depending on their value and the overall price elasticities of demand, an increase in price for public providers will result either in continued utilization, self-care, or substitution of private for public providers.

Alderman and Gertler (1989) examined the choice of providers for treatment of children in poor urban areas of Pakistan, and the possible impact of establishing user fees at government facilities. They determined that price elasticity of demand was moderate and declined as income rose. The cross-price elasticities for chemists and private doctors were greater than for self-care, and were higher for lower income groups and at higher user fee levels. A moderate increase in fees would produce some increase in self-care, but mostly an increased use of private providers.

The price of health care includes not only the monetary costs but also the nonmonetary costs, such as the opportunity costs of traveling and waiting. Where the money price is low or zero (as with free public services) these other nonmonetary private prices are more important (Becker, 1965; Acton, 1975). Where public funding is limited or workers are poorly disciplined or inefficient, rationing of care will occur through queuing or limited distribution or availability of facilities. For the individual this will represent a real cost in terms of lost time and inconvenience. This may explain why private sector provision continues to flourish, despite the existence of free or almost-free government medical services in many developing countries.

There is some evidence that private practitioners are more likely to adjust their prices for different clients. Price discrimination can reflect "monopolistic" behavior for increasing their net revenues, or be for philanthropic reasons. While some studies have demonstrated this in developed countries (an example is a study of New Zealand general practitioners [Dovey and Tilyard, 1991]), there have been very few such studies in developing countries. One such study from Indonesia (Berman et al., 1989) was moderately suggestive that price discrimination according to patient income did occur, and that private providers were more likely to do so than public providers. This may be one way that private providers around the world have exercised competitive advantage over the public sector. Public facilities generally have less liberty to modify official fee levels, have less of an incentive to maximize income by price discrimination, and are likely to be already charging fees far below market clearing rates. It is unclear how patients' perceptions of prices are influenced by this. In analyzing the effects of price changes in the public sector, it should also be noted that the supply response of the private sector has generally been little explored.

#### 5.1.4 Quality

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##### **Summary**

- ▲ **In determining demand, user-perceived or consumer-related aspects of quality are more important than technical quality.**
  - ▲ **Perceived quality differentials influence the choice between public and private providers. They are important in sustaining more expensive private services.**
  - ▲ **Private providers have greater incentives and ability than public ones to provide higher quality services, in terms of patient-perceived quality.**
  - ▲ **Technical quality differences between public and private providers are poorly understood. Private providers face incentives to provide both higher and lower technical quality services.**
- 

Quality influences the choice of health care providers. Quality differentials between public and private providers will, other things being equal, increase demand for the higher quality services. Where public services are generally considered to be of lower quality, this may be a key factor



supporting the existence of a private sector, even though public services may have excess capacity and lower prices.

It is important to distinguish between *quality as perceived by users* and *quality as a technical standard*. We would hypothesize that it is the former that has the greatest impact on the demand for private health care. Often user perceptions of quality include both their own views of technical quality (which may or may not be valid, but for which they are usually ill-equipped to make an informed judgment) as well as their personal satisfaction. It should be noted that most studies of quality in developing countries have focused on technical aspects of quality, and that few have satisfactorily examined the importance of consumer perceived quality.

Qualitative and ethnographic research has contributed some insights into why private providers might be perceived as being of higher quality. Some of these factors relate to clinical practices, such as the use of technologically more sophisticated diagnostics (e.g., Xray, ultrasound) and therapies (injections), or the use of multiple systems of medicine. Others may relate to the nature of the patient-provider relationship, where private practitioners work on a familiar commercial basis with some accountability, or establish strong personal and individual links with patients that have psychological value. In contrast, in public clinics the provider on duty may change from day to day and payment may be on the basis of an in-advance per-visit charge, rather than by results or by episode.

Numerous studies have shown that various other consumer-related aspects of quality are important. In a focus group study of underutilization of public health care facilities in Nigeria, Attah (1986) found that "harsh, rude and uncaring" manners by health service personnel, as well as nepotism, were major causes. In another example from Sri Lanka, Caldwell et al. (1989) found that at the primary care level, the most important reasons for visiting a private doctor were the long wait in public facilities, followed by cursory treatment by staff, failure to listen to problems, and second-rate medications. Various consumer surveys in both developed and developing countries have often suggested that the private sector provides a more courteous service than the public sector (Bennett, 1991, 18). At the hospital level in Sri Lanka, another survey found that the overwhelming majority of inpatients choosing private care cited reasons of better quality medical and nursing care, as well as of more comfortable, spacious, and cleaner facilities (Rannan-Eliya, 1990).

In the sense of these more consumer- or client-oriented aspects of quality, private providers will tend to be of higher quality than public providers. Public health care systems operate under conditions of budget constraint, rigid pricing structures, standardized low-cost treatment protocols, and minimal incentive systems for their personnel. However, ability to be market responsive need not be absent from the public sector. Recent health care reforms in Northern Europe have attempted to introduce "internal markets" or other pro-consumer incentives into the public sector (Saltman and von Otter, 1992). By increasing consumer responsiveness and thus consumer-perceived quality, these may serve to reduce demand for private services at the margin.

The relative technical quality of public versus private provision remains a significant question for research. Observers have found the quality of mission hospitals in Africa to be good (Vogel and Stephens, 1989), but this may have much to do with the particular motivations and conditions of service of staff in religious organizations. Standards of other private providers may be extremely poor. Uplekar (1989a and 1989b), in his study of private practitioners in the slum areas of Bombay, reports that treatment practices with respect to tuberculosis and leprosy were seriously deficient, inappropriate, and too costly. In a different study by Peters and Becker (1991) of private and public ambulatory facilities in the Philippines, a mixed picture emerged, with observed quality being better in the public clinics on some measures and in the private clinics on others. While some private providers may face both internal and external incentives to improve technical quality, others may face opposite incentives. If costs can be decreased by reducing technical quality, and this does not significantly affect consumer's perceptions, providers may have less incentive to improve or maintain quality.

To further complicate matters, it is also useful to remember that in many cases the private and public providers are one and the same person, who may meet the consumer at different times and places as both public or private caregiver (Berman et al., 1989). When working as a private individual, a publicly employed provider has an incentive to provide better quality care. He or she may also encourage the perception of a difference by actively telling patients to come privately to obtain better care.

Not only is quality important in determining the choice of providers; patients also appear to be willing to pay for higher quality services (Ellis and Mwabu, 1993). Bitran's (1989) study is also suggestive that quality perceptions vary between individuals of different sociodemographic groups.

A study by the World Bank in Nigeria made a rare attempt to estimate the effects on demand of changes in quality in public and private health facilities (Denton et al., 1991). It used a dataset obtained from a detailed survey of public and private health facilities in Ogun State. The effects of price and quality changes were simulated, and changes in utilization estimated. It was concluded that improvements in quality would result in significant increases in utilization, and that patients would be willing to pay increased prices in return. In fact, quality improvements would have a more significant impact than lowering prices to zero. These effects were more marked for public facilities, especially in the case of improved drug availability, and would shift individuals not only from self-care, but also from private health care. This underlines again the importance that quality plays in sustaining private health care facilities alongside free or almost-free public ones.

### 5.1.5 Risk-sharing payment mechanisms

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#### **Summary**

- ▲ **Insurance will increase demand for most reimbursable items of care. If private providers are covered, this will generally encourage their expansion.**
  - ▲ **The expansion of private insurance has historically followed that of private services.**
  - ▲ **The potential for private insurance to substantially increase the level of private provision is limited in poorer countries. However, it can have large effects in specific areas (e.g., in cities) and can enhance the effects over time of income growth on private provision.**
  - ▲ **Social insurance offers greater opportunities to achieve wider coverage, and thus can significantly increase the demand for private services, if they are included in benefits.**
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Risk-sharing payment mechanisms, such as insurance, can be a major determinant of private health care development on both the demand and supply sides, with both short-run and long-run results. Two major types of insurance must be considered: private voluntary insurance and social insurance.

The major influence of insurance and other similar arrangements on the demand side is to reduce the effective price faced by the consumer. This has the well-known effect of potentially increasing consumption, coupled with the problem of moral hazard. Demand for all reimbursable health care rises. In addition, by reducing the price differential between reimbursed and other subsidized providers, insurance will reduce the importance of price in determining the choice between them. Insurance coverage will thus enhance the importance of other, nonprice factors in determining the choice of provider. Typically, the out-of-pocket cost of private care is greater than public care. Therefore, the introduction of insurance that pays for private provision will increase the demand for private care.

At a macro level, it is not always easy to separate out the effect of insurance on demand from that of other factors. In many middle-income countries in Asia, rapid growth in the private health care sector has occurred in the context not only of increasing insurance coverage, but also of rapid economic growth. Evidence on the income elasticity of demand and the experience of Thailand, where insurance coverage is quite recent, suggests that insurance has played the minor part in this growth. But in an analysis of health care utilization in Korea, the Institute of Hospital Services at the Seoul National University Hospital found that health insurance coverage was one of the key statistically significant independent variables. The rapid increase in health care utilization that occurred in Korea in the 1980s with an increase in insurance coverage from 0 to 100 per cent could be largely attributed to insurance (World Bank, 1989, 78; De Geyndt, 1991).

The role of insurance in expanding private provision may be greater in conditions of low or hesitant economic growth. The experience of Lebanon after the outbreak of civil war in 1975 supports this. Publicly supported social insurance was introduced during the prewar years of the late 1960s and early 1970s. After 1975, as the other sectors of the economy declined and most state services collapsed, the private hospital sector enjoyed a boom. Private hospital construction rapidly expanded, with 55 new hospitals being licensed in the first 6 years of the war (Kronfol and Bashshur, 1989).

#### 5.1.5.1 Private Health Insurance

It should be noted that in developing countries there are two important forms of private insurance: self-insurance provided directly by employers, and formal insurance usually provided by insurance companies. The first is extremely common around the world, and can be regarded as a form of employer beneficence. Its extent is difficult to quantify. It typically predates the introduction of formal insurance schemes and is not restricted to large employers.

Formal private health insurance will thus only be made available because its suppliers believe that it will be profitable to do so. This implies that there is or there will be a demand for it. It is thus plausible to expect that private insurance follows the development of significant private provision, and that it may subsequently enhance the growth of that provision by drawing in some new resources and reducing some constraints on demand. This seems to have been the pattern not only in the United States, but also in developing countries, such as Thailand or Sri Lanka.

In Latin America, the development of private insurance and other collective arrangements gave a major impetus to the expansion of private services in the 1970s. In the 1980s, it enabled further growth in private hospitals, despite indifferent economic growth (Gwynne and Zschock, 1989), indicating that the role of insurance in expanding private provision may be greater in conditions of low or hesitant economic growth.

For private insurance to be profitable, premiums must cover the payment of benefits, transactions costs (i.e., administrative costs), and the net profit margin. The amount required to cover benefits consists of two components.

The first is the premium for protection against risk, assuming that moral hazard does not exist. The second is to cover the increased costs due to moral hazard. Since the latter is presumably related to the price elasticity of demand, theory suggests that private insurance should cover more price-inelastic services more completely; and develop first for those services that are most inelastic, and only later for other more elastic services (Folland et al., 1993, 272). The historical and empirical evidence from both the United States and developing countries seems to support these predictions.

The transaction costs in insurance are likely to be high when insurance is first introduced and the number of insured is small. These high transaction costs will make insurance initially relatively expensive. Risk pooling by providing insurance coverage through groups reduces the transaction costs and

thus makes insurance cheaper. Risk pooling is usually done by insuring people at their workplace. Formal insurance schemes also require the regular payment of cash premiums. For these two reasons, private insurance is likely to be restricted to the formal sector (in particular, larger employers) and high-income individuals.

In most developing countries, this results in a limited potential for expansion of private health insurance beyond the needs of the more affluent members of society or the typically small organized sector. Premiums for other groups will be relatively high, making private health insurance unaffordable. The transaction costs required to deal either with adverse selection (e.g., the elderly or chronically sick), or with the associated level of risk will be high. Thus, there are limits to the extent to which private insurance per se can expand the market for private health care, although within those limits there can be sizable and highly visible development of the private health care sector, especially in the cities. In general the extent of private insurance coverage in developing countries tends to be limited. For example, in Zimbabwe, which has one of the best organized insurance industries in Africa, the total number of individuals insured amounted to only 4.6 per cent of the population in 1986. The maximum potential market for insurance is estimated to be only 11 per cent of the population (World Bank, 1992c).

#### 5.1.5.2 Social insurance

Social insurance differs from private or voluntary insurance in that it is compulsorily required under legislation. There are various types of social insurance, but they are generally characterized by a high degree of governmental control and regulation. Public subsidy may also be significantly high.

The impact of social insurance on the private sector critically depends on whether reimbursement of private providers is permitted. In many countries, especially in Latin America and francophone Africa, social insurance has often meant a system that both insures and provides care. Social insurance systems have typically built or organized their own facilities, including clinics providing ambulatory care and hospitals, or paid the public sector to provide care. Such arrangements may have a negative effect on the development of the private provision sector. Growth in private provision may then depend on the relaxation of reimbursement rules to allow payment of private providers, as has occurred in Chile (*see Appendix C*).

Social insurance has a greater potential to broaden population coverage and permit cross-subsidies between groups in the population, since contributions are often mandatory and may be set with vertical equity goals. The addition of budgetary subsidies from public resources is more feasible and can enhance coverage as well as reallocation. However, there may be limits to deepening of coverage. In Latin America, resistance from insured pressure groups, including unions and firms, to increasing costs has limited expansion of insurance (Mesa-Lago, 1985; Borzutzky, 1985). Nevertheless, social insurance systems can be expanded to most or all of a population given time and sufficient national commitment, as has occurred in Brazil or Korea. This point is important, since

countries that have succeeded in creating universal access to private provision have done so through social insurance.

#### 5.1.6 Development of Transport

The development of roads and transport services will act to reduce travel costs and travel times to facilities, especially for rural inhabitants. Increased accessibility in effect reduces the cost (both monetary and nonmonetary) of treatment for the individual. This will increase utilization of all health facilities—those in rural areas and also urban ones made more accessible to rural patients.

Increasing access influences the private health care sector through increasing the size of its potential market. Any private facility will only exist where the demand for its services in the surrounding area is above a certain minimum, which allows it to earn normal profits, or at least not sustain losses. This will not be the case with public facilities, where in general demand does not typically have to meet supply. The size of the area which generates the demand is dependent on the ease of travel. Improving transport will therefore increase the supply and distribution of private services (Wanmali, 1992).

#### 5.1.7 Medical Referral System

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##### **Summary**

- ▲ **A significant component of demand for private medical services may be induced demand created by providers.**
  - ▲ **The impact of this on private health sector provision depends on the structure of the medical referral system.**
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The health care market is unusual for the extent to which providers can themselves determine demand. Although patients themselves must decide whether to initiate a consultation, they subsequently give up a large part of the responsibility for further usage to the provider, typically a physician.

The structure of the medical referral system influences the level and direction of the demand for which providers themselves are responsible. This in turn can influence the growth and composition of private provision. For example, in some countries clinic physicians are not allowed admitting privileges, while in others government specialists may not be allowed to have private patients. Referrals in some cases are made to public hospitals or diagnostic laboratories because they are cheaper. This may be a form of public sector subsidy to private providers, especially where physicians are permitted to charge private fees for services rendered in government hospitals, while patients pay subsidized hospital fees. Private practitioners may otherwise prefer to use private referral facilities because of better access, and are also likely to be better disposed towards private facilities, than other

providers might be. (In many countries, private providers do not have any official role in the public sector referral system, and so cannot officially refer patients to public facilities if they so wish.) This preference is more likely to be the case with their patients as well. It is also the case in many countries that primary providers may have direct pecuniary interests in referral facilities.

In Sri Lanka, a 1985 survey (Aloysius et al., 1987) of the island's private family practitioners revealed that they referred on average 13.3 patients a month to a specialist for private consultation, but only 1.9 a month to a specialist in a government institution. Referral rates for admission were more equal at 5.2 a month to private hospitals and 4.6 a month to government hospitals, although more than 90 per cent of all admissions nationally were to government hospitals.

These factors may create a kind of "multiplier" effect in the development of private services. Thus, expansion in one level of private services may increase the demand for the next higher level of private services. This may be a partial explanation for why the expansion in private general practitioners in Sri Lanka in the 1970s and 1980s was followed later by substantial growth in the private hospital sector. It is also a possible explanation of Bhat's (1993) finding that the percentage of dispensaries in the private and voluntary sector is strongly correlated with the size of the private hospital sector in different Indian states, although of course both may be the consequence of other general supply factors.

#### **5.1.8 Demographic and Epidemiological Factors**

Demographic and epidemiological variables affect individual health status and demand, although they appear to have only modest impact on the aggregated demand for medical services. An ILO (1989) estimate of future health expenditures in European countries, which took account of the higher utilization patterns of the elderly and the increase in the aged population, found that the increase in medical consumption resulting from population aging would only be 6 to 7 per cent between 1985 and 2015. The increases in intensity and quality of services were expected to be far more important factors.

The demographic transition in developing countries will result in a shift in the age distribution of the population, increasing the percentage of older adults. This may lead to increases in demand for medical care by the growing population (both in absolute and relative terms) of the elderly. However, the exact effect is difficult to predict as there may be a number of counteracting factors. One of these is that while the additions to the aged (more than 65 years) population will be large in relative terms, it will be small (in absolute terms) compared to the increase in the total population and the increase in the working population (15 to 64 years) (United Nations, 1990). Also, the increased elderly population may be poorer in terms of purchasing power than the rest of the population and so their impact on the effective economic demand for health care—public and private—will be somewhat less. In conditions of rapid economic growth this might also be accentuated, since rising wages will further reduce the real value of any income that they have (Carroll and Summers, 1989; Deaton and

Paxson, 1991). Counteracting this will be intergenerational transfers of income. The poorer elderly may also not, therefore, become an important market for private health care providers. The historical experience of developed countries also suggests that these demographic changes, and the accompanying socioeconomic changes, are associated with increasing reliance on public financing and thus a reduced role for the private sector.

In addition to demographic changes, there is an epidemiological transition. This has been characterized by increasing polarization (Frenk et al., 1989) with a low-mortality, wealthier urban population increasingly demanding care for noninfectious, chronic diseases (Griffin and Levine, 1991; Birdsall and James, 1992). (Note that this does not mean that the morbidity and mortality due to noninfectious diseases will be less in the poorer than the richer groups; the evidence is clearly that it will be higher as well.) The impact of these divergent patterns on private sector provision is unclear. It is argued that a rise in non-infectious diseases, which require more expensive treatment modalities, will result in an increased demand for medical services (Bobadilla and de Possas, 1992). Public finance and cost-effectiveness criteria suggest that the health needs of the more privileged "post-transition" population should be left to private financing and provision, freeing up more public resources to meet the "pre-transition" needs of the larger and more disadvantaged part of the population. Indeed, this is the logic behind many of the policy reforms being promoted by major international donors. However, the better-off groups are most able to shift public resources to themselves (Birdsall and James, 1992), hence the continued bias towards public sector provision of advanced urban hospital care in many countries, coupled with various kinds of hidden subsidies to the urban private sector. The presence of these groups are often critical in the creation of social insurance as well.

#### 5.1.9 Cultural and behavioral factors

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##### **Summary**

- ▲ **Sociocultural factors can influence the demand for private services.**
  - ▲ **Increased levels of education are associated with increased demand for higher quality medical care and for more modern treatments. This may increase demand for private services.**
  - ▲ **Previous exposure to and familiarity with modern medical services may lead to a greater and more differentiated demand for medical services. Over time this may lead to an increased demand for private medical services.**
- 

Sociocultural factors play an important role in the demand for and utilization of health services. This role needs to be better understood. It is also difficult to separate out the independent effect of such factors, as they are usually correlated with other determinants of more assumed importance, such as income and occupational status.



#### 5.1.9.1 Education

Education is a major factor in the production of health by households, but despite much research it is unclear what aspects of the education process are the most relevant and how they exert their effects. The following conclusions are suggested:

- ▲ Education increases the likelihood of seeking medical care
- ▲ Higher levels of education are associated with an increased preference for higher quality.
- ▲ Higher levels of education are associated with an increased preference for modern medical care over traditional medicine.

The first is important in that it increases the overall demand for health care, and the second in that it may favor a greater supply of private over public services. The third may benefit the modern private health care sector, but it also disfavors traditional providers, who typically also are private. Akin et al. (1981) in their study of health service utilization in the Philippines found that the percentage of mothers relying on self-treatment declined from 45 per cent among the least educated to about 30 per cent in the most highly educated. The percentage of mothers using private modern practitioners similarly declined from over 50 per cent in the most educated to only 25 per cent in the least educated.

A secular increase in educational levels can thus be expected to increase the demand for private services over time, although the composition will change away from traditional providers to modern ones. For example, in South Africa rising educational levels among nonwhites have been associated with increasing demand for private services and for higher quality (see *Appendix B*).

However, it should be noted that education can also be associated with increased preference for nonscientific therapies, to the extent that these embody higher perceived quality. In India, for example, homeopathy is most popular among the educated urban middle class. This is not unique to developing countries either, as a recent study in the United States showed that use of unconventional therapies was higher among those who were more educated (Eisenberg et al., 1993).

#### 5.1.9.2 Health Seeking Behavior and Historical Experience

Population groups differ significantly in their use of health services, even given similar conditions of income, personal education, and service accessibility. To some extent, these differences may be culturally determined and thus not so amenable to public policy intervention. However, there are many examples, mostly in the anthropology and sociology literature, of rapid changes in health-seeking behavior that are in response to exposure to modern health care. When people are given manifest proof of the effectiveness of new forms of treatment, they will be much more likely to shift away from more established forms, even if they lack the knowledge to understand the nature of the new treatment.

The provision of widely accessible health services may accustom people to resort frequently to medical services when ill. This process is independent of other social changes, including increased education, but usually parallels

them. This process of socialization can be expected to have two implications: there will be a secular increase in the overall demand for health care services, and accumulated knowledge of and increased experience and familiarity with all medical services will lead to increased ability to discriminate between providers and services and a greater concern with quality. If public provision initially provides a reasonable level of medical services, where none has existed before, then given time demand may increase and the scope for private sector activity may also increase, paradoxically because of the initial success of public intervention in changing illness behavior. An example of this would be the development of private services in Papua New Guinea (see *Appendix A*).

Measuring this process would be difficult, since so many other factors are also changing over time. However, there is some evidence from two countries that have a long history of good public health care services, that this process of consumer change does take place. In the United Kingdom, the evolution of social and consumer preferences in health care over 40 years seem to be much more important than mere disillusion with the existing system in explaining the recent rise in private services (Day and Klein, 1989). Similar mass changes in consumer preferences are also suggested by work done in Sri Lanka (Caldwell et al., 1989).

## 5.2 SUPPLY FACTORS

The supply of private provision will be determined in part by demand. It will also reflect the influence of the economic and social conditions determining input prices and availability. The key inputs can be grouped in the areas of capital, labor, physical plant, and technology—each of which responds to social, economic, political and regulatory factors.

### 5.2.1 Labor

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#### *Summary*

- ▲ **The supply of specialized labor inputs is a major determinant of the development of private health care provision.**
  - ▲ **Labor supply to the private health sector in developing countries will reflect the effects of education and training, immigration and emigration, competition with the public sector, and other non-economic factors.**
  - ▲ **Employment policies in the public sector may be important in increasing the supply of labor to the private sector, both full- and part-time.**
  - ▲ **A much better understanding of the incentives and constraints facing labor in the private health sector and the response of labor is needed to develop effective policies.**
- 

Labor inputs are a critical resource in the provision of medical care. The technical abilities required of personnel and regulatory restrictions upon them limit opportunities for substitution from outside the health personnel pool. The supply of personnel, such as physicians or nurses, is an important determinant of the development and composition of the whole health care sector, as well as of private provision, since the latter must compete with public providers for often scarce personnel.

The stocks of available personnel are determined by the entry of new individuals from domestic training facilities and from abroad or from the stocks of retired personnel, and by the exit of individuals due to emigration, retirement from work, and death. These stocks are then distributed between the private and public sectors. While overall numbers of personnel may be limited in this way, some substitution among different types can take place. For example, there is considerable cross-country variation in the ratio of physicians to nurses. The structure and composition of private health care provision may be significantly determined by such factors. (For example, a low nurse-to-doctor ratio may favor a predominance of ambulatory facilities, compared with hospitals, in the private sector. This may be a significant factor explaining the structure of formal private medical services in India, which are predominantly ambulatory.)

#### 5.2.1.1 Medical Education and Training

The training of physicians (and other personnel such as nurses or technicians) takes place in specialized facilities, which require not only considerable investment in terms of capital and staff, but also time for establishment. The ownership pattern of educational facilities varies considerably among countries. In most they are predominantly or exclusively publicly run, while in some they are mostly private, as is the case in the Philippines (Griffin and Paqueo, 1987). The existence of private training establishments in a country implies that market forces are allowed to operate to some extent in the health care sector, and that considerable private provision of health care already occurs. Individuals will only pay for a medical education if the perceived lifetime returns, both economic and non-economic, from a subsequent career are greater than the initial cost of a private education.

#### 5.2.1.2 Immigration

In many developing countries, imported personnel are an important source of labor supply. In some, the resources do not exist to train or keep personnel, and the gap is filled by foreign assistance, either official or nongovernmental. This is particularly the case in much of Sub-Saharan Africa, where the contributions of missions and other NGOs are often considerable. In other cases, it may be inefficient to provide medical education within the country, or there may be time lags in matching training capacity to changes in economic demand. This is typified by the richer developing countries, such as the Middle East oil-exporters, Malaysia and Barbados (Chellaraj, 1992).

There is anecdotal evidence that imported personnel who are employed officially or by NGOs are likely to engage in less private work than domestic indigenous ones. In a typical example, one Nigerian, after praising the dedication of a foreign doctor at a local hospital who had no private clinic, asserted: "You can't tell me of any [indigenous] doctor working in any of our hospitals who has not [a] private clinic—not even one" (Attah, 1986). There are three possible reasons for this:

- ▲ The economic incentive may be less, since imported personnel are relatively well remunerated to start with.
- ▲ Economic incentives may be of less importance than noneconomic motivations, particularly in the case of mission staff.
- ▲ Contractual restrictions keep imported personnel from engaging in private work.

#### 5.2.1.3 Emigration

The supply of private sector personnel can be constrained when public or private sector employees choose to emigrate rather than remain in the domestic labor market. The global labor market may compete with the domestic private sector for individuals in the public sector. It can act therefore as a constraint to domestic private sector development, or if restricted, support expansion in the domestic private sector by increasing the supply of available labor. In Korea the current rapid expansion of the mostly private physician and nurse workforce is partly due to the much reduced level of emigration which

has resulted from economic development (World Bank, 1989). The large expansion in the private sectors in many newly industrializing economies in Asia in recent years may also have been partly helped by a reduced rate of emigration.

#### 5.2.1.4 Links Between Public and Private Sector Employment

Public sector employment is another variable in the health care sector labor market. For example, in some countries the number of government positions has historically been far less than the output of physicians, reflecting a well-established private sector. In some of these countries, this is a recent phenomenon, a consequence of fiscal crisis or of deliberate privatization policies. In Chile, approximately 80 per cent of graduating doctors were traditionally employed by the state, but the number of positions was cut during the 1970s, until only approximately 25 per cent of new doctors were being employed by the early 1980s. This coincided with expansion of social and private financing for private provision—leading to growth in private practice (Scarpaci, 1988). Similarly, in Mali, a sharp cutback in public recruitment of doctors (to less than 10 posts a year, compared with 60 new graduates a year) is likely to initiate the expansion of a new formal private sector, despite otherwise difficult conditions (Brunet-Jailly, 1992).

In some countries, the problem is actually filling available public sector positions, since individuals may prefer to work in the private sector (or emigrate). In Papua New Guinea two- to three-fold differentials between public sector and private sector incomes are cited as being the major motivation for doctors leaving the public sector (see Appendix A). In post-independence Zimbabwe, doctors' wages were raised three- to four-fold, but without much impact on improving recruitment (Laing, 1992). The income differential may be extremely high, requiring increases that may not be justified in terms of the social benefits or in comparison with other competing uses for public funds. There may also be important nonpecuniary reasons for not seeking government jobs.

Where government jobs exist and are not adequately funded, government staff supplement their incomes by engaging in private practice. In Egypt, every graduating physician has historically been guaranteed a government post. However, because of the low wages associated with this policy, the vast majority practice privately as well. In Sri Lanka in 1977, a previously complete ban on private practice by government doctors was reversed to make public sector employment more attractive. While this expanded private sector provision, it also resulted in considerable improvement in the distribution of doctors to rural posts (Abeykoon, 1990). Such arrangements might be better characterized as government subsidies to private providers or part-time employment of private providers.

The existence of economic incentives alone may not be sufficient to attract personnel to work in the private sector. Non-economic factors can also be significant. Rural areas may lack medical personnel despite adequate earnings potential because of the lack of amenities and facilities, sociocultural differences, and reduced contact with specialist centers. Negative professional attitudes to private general practice may also play a role. A survey of the career preferences of Sri Lankan medical interns revealed that general practice was relatively unpopular compared with other specialties. It was thought that this was partly due to the lack of exposure

to general practice during training and the absence of a role in the official hospital referral process (Karalliedde et al., 1986).

Most of the factors discussed above would be arguments in an economic model of medical labor supply or the demand for medical education. There is virtually no empirical work available on the economics of medical personnel in developing countries—a fruitful area for new analysis to help in understanding the development of the private health care sector.

### 5.2.2 Capital

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#### **Summary**

- ▲ **The role of capital as an input for the health care sector has increased over time.**
  - ▲ **Capital can be an important determinant of the supply of private medical services. Its importance is greater at higher levels of organizational complexity.**
  - ▲ **The supply of capital may be subject to greater constraints in developing countries.**
  - ▲ **The supply of capital and the incentive effects on providers can be significantly influenced by government policy.**
- 

Capital is an increasingly important input into modern health care. Capital can be used to purchase facilities or equipment required for the delivery of health care or to finance the start-up operating costs of new private provision enterprises. Capital is also important in funding insurance schemes. The relative importance of capital compared with other inputs varies with the level of complexity and organization of the medical facility (see *Figure 2.1*).

The supply and cost of capital may be a more important factor in private provision in developing countries than in developed countries. Capital is scarcer and more expensive, and capital markets are generally less developed and more inflexible in poorer countries.

The supply of private ambulatory services is less dependent on the supply of capital than more complex provision organizations. The owner is typically the physician or provider. Investments for further expansion are usually funded from current revenues or family savings. Expansions in supply are more dependent on labor inputs and demand. Although banks can act as sources of finance, the amounts involved are modest. Expansion beyond the scale of a clinic thus requires additional funding, which can be from groups of cooperating physicians or other institutional sources. It is this kind of financing that is most subject to restrictions and constraints.

In the absence of a fully developed private sector, large employers may be early investors in direct provision of care from their own resources. Such companies are typically large industrial firms or involved in agroindustrial production or mineral extraction, with access to the required private sources

of capital. Tax laws may encourage such investments if investments are deductible as business expenses.

The other major forms of financing are direct investment by existing companies and prosperous individuals and indirect investment by equity investors. The former is the most common in developing countries, as equity markets are often underdeveloped. Historically, in many countries, such as South Africa (see *Appendix B*), there has been a sequential progression from the first type of investment through other institutional investors to equity investors over time. Increasingly, domestic and international funds are being invested in for-profit medical facilities in urban areas of developing countries (Griffin, 1989).

Foreign capital is important in some developing countries. Researchers have noted the efforts of American for-profit hospital chains to expand their operations overseas in the 1970s and 1980s (Roemer, 1987; Berliner and Regan, 1987), because of reduced scope for profitable expansion domestically (Michel et al., 1985). Factors encouraging such investment include the political receptivity to foreign capital, lack of comparable competition, and good growth potential in the demand for modern medical services. If individuals are already traveling abroad in substantial numbers for medical treatment, foreign investment to meet that demand domestically is particularly likely. Initial examples were in the 1970s in the Middle East. Subsequent investments have been in Latin America (Brazil, Ecuador, Mexico and Panama) and Southeast Asia (Malaysia and Thailand), where there are already large affluent populations. In the case of Latin America, the process has been encouraged by international donors wanting to expand the role of the for-profit sector in health care. Where established private hospital sectors exist, foreign investors may seek competitive advantage on the basis of better managerial and administrative skills.

International flows of capital in the health care sector are not wholly American, in the direction of developing countries or targeted at modern Western medical services. One German proprietary hospital chain, Paracelsus Corporation, invests internationally, as do Saudi and other Gulf sources. Many of India's new for-profit hospitals are financed through investment by "non-resident Indians" in the United States, United Kingdom, and Europe. An example in the case of traditional medicine is the Shanxi Medicines and Health Products Imports and Exports Company, which is reported to be involved in setting up several Chinese Herbal Medical Centers around the world, including in America, Europe, Africa, Japan, Thailand and Sri Lanka (Wijenaike, 1992).

### 5.2.3 Technology

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#### **Summary**

- ▲ **Technology does not appear to be an important determinant of the supply of private health care provision, although it is an important determinant of costs and hence private expenditures.**
  - ▲ **The availability of technology in the private medical sector reflects its rate of diffusion in the sector, and this is a function of medical education, the level of economic resources and the nature of incentives for private providers.**
- 

Technologies in health care include not only those which affect the method of diagnosis and treatment, but also those that are used to organize and assist the delivery of care. Major innovations of both types are influential in the health care sectors in developed countries, both public and private. Generally, private providers respond more rapidly to the opportunities offered by new technologies and thus reap their benefits sooner. In developing countries, this reflects the highly centralized bureaucracies found in many countries and the more constrained administrative conditions under which public providers work, compared to the private sector.

There are few barriers to the flow of knowledge about clinical practices or medical technologies across international borders. Whether such knowledge is transferred depends on the medical education system, the nature of incentives, and the level of economic resources. New technologies have led to creation of new forms of private provision, e.g., the free-standing diagnostic facilities offering Xray and ultrasound in South Asia.

Managerial and organizational technologies can offer institutional providers, in particular, advantages in terms of cost efficiency or quality. If institutional providers can use these advantages to shift demand away from other providers, private or public, then such advantages may affect the composition and size of the private sector. Such a situation is frequently associated with the entry of foreign capital or joint ventures. In the case of health care financing, specific technologies and skills can allow completely new services to be offered (e.g., HMOs, private insurance), which may result in major changes in health care provision; however, this is not the subject of this paper. Nevertheless, there is little empirical evidence to suggest that these factors have been key determinants of the development of private health care services.



#### 5.2.4 Insurance and Risk-Sharing Mechanisms

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##### **Summary**

- ▲ Insurance can have major long-run effects on the supply, composition, and costs of private health care provision.
  - ▲ Insurance can significantly effect the balance among different types of providers, and thus alter the organizational pattern of the private health care sector.
  - ▲ Insurance can be a major determinant of investment in new technology and equipment by the private sector.
  - ▲ Much better understanding is needed of the nature of provider response to the different incentives and constraints resulting from insurance practices.
- 

The most visible impact of insurance and other risk-sharing mechanisms is on the level of demand for private services. However, in the long run these mechanisms can also have a significant impact on the supply side. This is because providers will respond to the changes in incentives that insurance creates. Such a response can influence both the extent and composition of private services.

If insurance payments account for a significant proportion of revenue for private sector providers, these payments are likely to be an important determinant not only of overall volume, but also of the organization and composition of private provision. The Medicare system in the Philippines has a major impact on private provider characteristics, quite out of proportion to its extremely small contribution to overall health financing. It apparently may have encouraged the proliferation of small, private hospitals of low capital intensity despite its relatively small size (Griffin, 1992).

The incentive effects on providers are determined by the patterns of reimbursement:

- ▲ what and who is paid for
- ▲ the level of reimbursement
- ▲ the impact on the price borne by the consumer.

Clearly, supply of reimbursable over other items will tend to increase. There are now many examples in the literature on the effect of financial incentives on treatment practices in developing countries (Barros et al, 1986; Rodrigues, 1989; Kutzin and Barnum, 1992).

Insurance can affect the relative proportions of outpatient to inpatient care provision in the private sector. Insurance schemes will often restrict payment only to include hospitalization or certain approved types of provider. Private insurance schemes are unlikely to completely cover ambulatory care, as such care typically consists of small and frequent outlays; the element of risk is small, and so the benefit of insurance for the consumer is small. This

suggests that the introduction of private insurance will expand the market for hospitalization much more than for ambulatory care.

A common characteristic of insurance reimbursement is that it is restricted to approved providers, who are usually physicians or hospitals. This will tend to shift utilization away from other private providers, such as traditional practitioners or nonphysician providers. This may have benefits in that it improves standards of care, but a shift to more specialized and formally qualified personnel is not always advantageous. The introduction of insurance in Korea in 1977 has led to an increasing specialization in the largely private medical workforce (World Bank, 1989). Between 1978 and 1986, the average annual growth rates for physicians (7.2 per cent) and their complements (nurses—11.5 per cent, aid nurses—16.1 per cent, technicians—39.5 per cent) have been much greater than for physician substitutes (midwives—5.8 per cent, pharmacists—5.2 per cent, oriental medical doctors—5.0 per cent). The insurance system did not directly reimburse the latter categories for their services. While visits to drug stores, formerly the most popular facility for care, have declined by almost half in rural areas, visits to rural clinics and hospitals have almost doubled (Kim et al., 1986). This trend to more expensive providers has increased costs in a way that may not be justified by increased benefits.

Initially insurance schemes may set provider payments according to market rates (in the United States it was "usual and customary charges" [UCC] ). As insurance expands and cost escalation is perceived as a problem, or with gradual market dominance of private or social insurance payers, fee setting by the payer has increased. Two general methods for setting provider payments are widely recognized: retrospective payment of charges, and fixed fees set in advance (prospective payment). Under retrospective reimbursement, providers are compensated on the basis of billed amounts or some adjusted amount, such as UCC or "cost-plus" rates, e.g. their actual costs plus an additional amount for profit. The perverse incentives of this cost-plus reimbursement for cost control are well known in developed and some developing countries (Feldstein, 1993, 18) but are not yet an issue in most developing countries, partly because of limited insurance coverage.

If payments are set at a level that does not reflect the individual providers' actual costs or charges, the actual level is important, as is the accounting unit for which payment is made. If payment levels are set high, at the level of costs of the more specialized providers, then private sector expansion will be encouraged at all levels. If payments are sufficient to cover capital costs (i.e., construction and equipment), private hospitals can continue investing in their capital base and thus raise their capacity and technological level. However, this raises their unit costs, and payment levels will then usually rise to compensate. If payments are set low, then this may not occur and only the cheaper providers will be profitable and expand. The U.S. experience has also highlighted incentives to providers to adjust their patient care practices in response to both the types of payments and their level. Note that if payment schedules are not adjusted with inflation, their relative level will decline over time as well by default.

Experience in the OECD countries has also highlighted the importance of what is being paid for in affecting costs and provider behavior. For example,

payments can be for procedures, cases, or cover individuals over a certain time period (capitation). The effects of payment practices have been reported in the Philippines, where low Medicare payments have favored a proliferation of small, low-technology, single-proprietor facilities (Griffin, 1992). However, in the case of Japan, insurance fees were set low to favor and encourage the expansion of clinic-based physicians providing ambulatory care. Drug and laboratory test fees were kept high, which allows providers to increase income by over-supply of these items. This is more beneficial for the clinic-based practitioners than for hospital-based ones, for whom the proportional benefit is less and who are also generally salaried. While this has led to a proliferation of private, for-profit clinics (70,617 in 1978), it is also cited as a major structural factor constraining national health expenditures (Tanaka, 1985; Ikegami, 1991).

Insurance schemes often incorporate copayments or deductibles. These affect the price borne by consumers, and thus the pattern of their demand. If insurance reduces out-of-pocket expenses for hospitalization below that for ambulatory care, then it may encourage a preference for hospitalization, and thus expansion of private hospital provision. This may be a factor behind excessive hospitalization in the United States, where insurance and public subsidy covered 92.4 per cent of hospital services, but only 71.2 per cent of physician services in 1982 (Tanaka, 1985).

When most of the cost of treatment is borne by the insurer or prices are fixed, this has led in certain countries to a change in the nature of provider competition. The basis for provider competition has shifted from competition on price to competition on nonprice factors, usually perceived quality. This is a feature of the medical market place in Korea (Kutzin and Barnum, 1992), where the shift in provider competition has led to rapid investment by hospitals in high-technology equipment as a means of attracting patients. A similar phenomenon exists in Japan.

In developing countries the long-run impact of insurance on technology is likely to differ. In the United States, it has been argued, insurance has led to increased research and development to create medical technologies, since medical suppliers faced a guaranteed demand with few price constraints (Weisbrod, 1991). However, developing countries are not so important in the creation of medical technology. The effect of insurance will be mainly through increasing the importance of technology differentials between providers as a competitive factor. This will increase the incentives for providers to invest in new equipment. The net impact will be an increased rate of diffusion of (usually foreign) technologies throughout the private health care sector. This could have important secondary effects on the demand for foreign exchange.

## 6.0 GOVERNMENT POLICIES THAT INFLUENCE THE DEVELOPMENT OF PRIVATE PROVISION

Governments are extremely important influences on the development of private services. The approaches of governments vary immensely from complete indifference and noninterference to control and regulation of private services or substantial financial subsidies. They may also, especially in recent years, seek to actively enlarge the role of the private sector, namely "privatize." Strictly speaking, "privatization" refers only to the divestiture from the public to the private sector of the ownership and/or control of productive assets or services, their allocation and pricing, and the entitlement to the residual profit flows generated by them (Adam et al., 1992). However, the definition of privatization is often stretched to include simply removing government action from a particular subsector of health care or actively supporting development of private provision.

Most developing countries have implicitly accepted the need for a mixed supply, while officially emphasizing public provision. Under certain sets of circumstances, governments may accept as a matter of policy a greater reliance on private services such as the following:

- ▲ The desire to increase the resources entering the health care sector as a whole
- ▲ The need to selectively increase the supply of medical services to politically important constituents, over and above that generally available from the public sector, e.g., in Argentina, Brazil, South Africa, Bismarck's Prussia, Japan
- ▲ Ideologically based beliefs about the optimum public-private mix (e.g., Chile, Singapore, the formerly socialist economies of Eastern Europe)
- ▲ Pressure from outside donors
- ▲ High income growth leading to rapid, uncontrolled expansion of private services.

In trying to understand the particular choices actually made by policymakers and governments, it is also useful to take into account their perceptions and those factors that influence them. From this perspective, Grindle and Thomas (1991, 34-35) identified two important factors as determining government policy: the "ideological predispositions," and the professional expertise and training of the elites concerned.

Thus the different approaches to private provision found in different developing countries are often influenced by approaches of particular developed countries: the UK in the case of many Commonwealth countries and South Africa, France in the case of most francophone African nations, Japan in the case of Korea, and Spain and the United States in the case of many Latin American countries. While this is not particularly surprising, it does mean that the diversity of experience with private provision throughout the world is rarely drawn upon by policymakers in any one country. For example, in more than twenty papers on health policy in South Africa reviewed for Appendix B, there were dozens of references to the experience of UK (usually positive) and the USA (usually negative), but only three or so to Latin America and Germany, and none to any other countries in either Africa or Asia.

Governments can influence the development of private health care services indirectly by their impact on the general social and economic environment, and directly by intervention in the health care sector. Such interventions, which influence the development of the private health care market, can be examined in terms of whether they act through either the demand side or the supply side. They can seek to influence the overall quantity of private provision or its composition. These interventions have an impact because they necessarily affect the various determinants of private sector development, which Section 5.0 has attempted to cover. Better understanding of these determinants, therefore, should improve the effectiveness of government action with regard to private health care provision.

The indirect impact of government policy is of more importance than often realized. The role that governments play in macroeconomic management and general socioeconomic development is of fundamental importance to the health care sector. Economic growth increases real incomes, the numbers formally employed and in receipt of regular incomes, the stocks of human capital and technology, and the potential for increasing tax revenues or insurance contributions. Macroeconomic stability improves the predictability and stability of the market and investment conditions within which providers, investors and managers must operate. Social development independently influences health seeking behavior and the demand for higher quality medical care. These determinants have an important impact on the development of any health services—public or private.

There are a number of possible areas for direct state intervention. Approaches can be categorized as follows:

- ▲ Public production or provision
- ▲ Economic incentives or disincentives, in the form of taxes or subsidies
- ▲ Regulation and licensing
- ▲ Interventions in factor or input markets
- ▲ Public information

These will be covered in the following discussion.

## 6.1 Demand Side

Macroeconomic factors are the major determinants overall of the demand for health care. However, there are a number of direct public interventions or policies that can influence the demand for private health care services.

### 6.1.1 Public Production or Provision

The state can influence the demand for private services by direct involvement on the supply side through public production of health services. This will influence the demand for private provision via the mechanism of public-private sector competition.

#### 6.1.1.1 Quantity, Distribution, and Composition of Public Services

The quantity, distribution, and composition of public services are determined by the level and pattern of government expenditures on public provision. Where public services are deficient in terms of quantity or quality with respect to the actual demand for health care services or where the nonmonetary costs of subsidized health care are high, then the demand for private services will be greater.

Therefore, from a public sector viewpoint, the provision of public services themselves can be used to modify the level and composition of private services. If the overall level of public expenditures is kept low or is not increased at a rate commensurate with increasing demand, then demand for private services may grow.

Within a country the geographical distribution of publicly provided services may also influence the provision of private services. Griffin and Paqueo (1987) examined the changes in distribution of hospitals and hospital beds across provinces in the Philippines between 1972 and 1983. During this time, there was a major increase in the overall number of hospital beds, and a significant rise in population-to-bed ratios, as well as an improvement in the distribution of beds across provinces. When these changes were disaggregated into public and private components, it was found that the growth in private sector beds was greatest in those provinces that were worst off in terms of population-to-bed ratios in 1972, increasing by 555 per cent in the "worst 10" provinces compared with 167 per cent nationally. These trends were later somewhat reversed. During 1983 to 1990, the public sector gained 7,584 beds, while the private sector lost 2,906 beds. This expansion in public sector beds, at a time of generally poor economic growth and stagnating per capita incomes in the Philippines, was probably substituting for private provision (Griffin, 1992).

#### 6.1.1.2 Pricing Policy in the Public Sector

The level of prices in the public sector influences the demand for comparable private services. Increasing government prices, without any other

changes, will tend to shift demand towards private providers. The exact impact will depend on the importance of other factors in the choice of providers by patients, such as quality and nonmonetary costs, the relevant cross-price elasticities of demand between public and private providers, and the price response of private providers (see *Section 4*). The effects of such changes will vary by income levels—at lower incomes the effect is more likely to be reduced utilization of all providers. The use of user fees in the public sector is a much overlooked method of influencing the development of private services.

Public sector facilities may underprice private competitors by setting fees below the cost of the services or not rigorously collecting them. Not setting fees sufficiently high to cover the capital or overhead costs involved represents a hidden subsidy, and can significantly undercut other private services, making them unprofitable. In Belize, this type of competition resulted in the failure of all three private hospitals that had been established in Belize City (La Forgia et al., 1991).

The structure of the price schedule in government facilities can also be used in efforts to control the composition of demand for private services. If inpatient care is largely free, while prices for outpatient care are set high, then private ambulatory provision may expand relative to hospital capacity.

#### 6.1.2 Taxes and subsidies

Governments can directly influence the demand for private health care through a number of tax and subsidy policies. Taxes on the provision of medical services or products act to increase their price and thus reduce demand for them. However, in many countries such taxes are not significant, and little scope exists for reducing them to encourage demand. In countries where personal income tax payments are significant, it may be possible to increase demand for private services by making medical expenditures tax deductible. Examples of countries with such policies include Zimbabwe, Brazil, Colombia, and Mexico, but it is again unclear how relevant such policies will be in most low- and lower-middle-income developing countries, where the income tax base is low. Caution must also be advised in the use of such tax exemptions. Once established they are often politically difficult to remove, as has been the case in the United States. This may be a problem, as tax exemptions are typically regressive in their distributive impact. For example, in Mexico, the beneficiaries of such implicit subsidies are the middle and upper classes, who are the only ones who earn enough to pay taxes. The rest of the population uses private provision but does not benefit (Cruz et al., 1991). In most cases these subsidies are open-ended to the extent that there is no limit to the amount of subsidy that individuals can capture. Possible solutions may be to limit the total amount of tax deductions claimable or to limit the subsidy to low-income groups only.

### 6.1.3 Insurance and Risk-Sharing Mechanisms

In many middle-income countries, or urban areas in some low-income countries, the major intervention or development that will alter the nature and extent of demand for medical care will be insurance. Insurance will expand both the demand for and the supply of private services for all the reasons given in Section 5.0. Government approaches with respect to insurance provision include introducing social insurance, taxes and subsidies, as well as regulation and legislation. The first choice is of major importance because of its long-term implications for the structure of the health care system (see Section 5.0).

Even if there is no social insurance, governments can control private insurance through regulation of insurance reimbursement rates or premium structures to achieve broader social goals. The two major areas for intervention are the use of risk-rating by insurance companies, and the overall level of fees and premiums. For example, the greater the use of risk-rating, the less the degree of cross-subsidization. Deregulation of the insurance industry in South Africa resulted in greater risk-rating, but may have had negative impacts in terms of the long-term expansion of private provision (see Appendix B). Similarly, controlling the overall level of fees may be potentially of some importance. In Japan keeping insurance fees low appears to have encouraged the expansion of ambulatory care providers (see Section 4).

Government subsidies can be given to reduce the cost of insurance to both employee and employer, and thus increase the demand for health insurance. Such subsidies can be given directly in the form of contributions or vouchers, or indirectly in the form of tax exemptions. Direct transfers can be made to or on behalf of the insured persons, their employers, or the insurance companies. Tax exemptions (e.g., for insurance premiums) also represent transfers, but indirect ones. These measures may be extremely useful in the initiation of widespread insurance coverage. Direct subsidies or technical assistance to insurance companies may also be particularly effective.

Government policies to support insurance, particularly private insurance, should be developed with caution. There are limits to the extent to which private insurance will cover the population. Removing tax exemptions once they are given can be extremely difficult politically, as is the experience in the United States. If social insurance is the goal, private insurance could eventually become a hindrance, not a help. Private insurance also brings increased risks of cost escalation, which can be difficult to control. Subsidies given in the form of unrestricted tax exemptions will represent more of a subsidy to higher income individuals and thus may conflict with equity goals.

A major constraint to the expansion of private provision to the whole population is that it will remain too costly to certain low-income individuals. This can only be resolved by the transfer of subsidies to such individuals either from government budgetary resources or other insurance funds. Direct transfers to individuals to increase their purchasing power and thus access in the market for medical services is in practice difficult to arrange. Social insurance systems provide the most successful mechanisms for doing so to date.



#### 6.1.4      Public information

The use of public information or education appears to be a largely unexplored area for intervention. By providing patients with information, their health-seeking behavior and thus demand patterns can be changed. This has been most developed in the field of social marketing, directed at family planning and selected public health technologies.

Potentially, information could be provided to influence patients in their choice among providers. For example, the area in which consumer ignorance is greatest is in determining the technical quality of providers. Information could be given to help consumers, either by educating them in what is considered best clinical practice or by providing them with information about objectively determined characteristics of private providers. Examples of the latter could include developing requirements to clearly post information about a provider's qualifications and certifications or fee schedules.

The above are all examples of direct intervention. However, in many developing countries another possible mechanism for informing consumers is the mass media. The ability of independent or relatively independent media in reducing or constraining corruption and inefficiency in the public sector through exposure is well recognized. This could also apply to private health care activities. This may be of some importance, since many countries lack the administrative resources to regulate the private sector effectively, and in practice this is now more likely to happen as a result of competitive market pressures.

Finally, it should always be remembered that public provision itself may have an important role in educating consumers about the effectiveness of modern medical care, especially where that knowledge is relatively lacking. For example, in Papua New Guinea the widespread provision of health services by the public sector appears to have played an important role in creating a demand for private medical care (see *Appendix A*). Elsewhere, where familiarity with modern medical care is greater, publicly provided services may act to inform consumers as what acceptable levels of quality are.

## 6.2 Supply Side

Governments have a number of policies available to them that can influence the supply side of the market for private health care services. They generally involve interventions in factor markets as well as licensing and regulatory approaches. Most of these are aimed at enhancing or controlling the supply of inputs to private providers, such as labor, capital, technology or equipment and supplies.

### 6.2.1 Interventions in Factor Markets

#### 6.2.1.1 Labor

The supply of health care personnel, in particular doctors but also nurses and other support staff, is a significant factor in the development of private provision. Governments have considerable opportunity and power to intervene in the medical labor market, e.g., through direct provision and/or subsidies (principally to education) and licensing.

The level of direct provision and/or public subsidies to medical schools and similar institutions can be used to control the overall stocks of personnel available to meet the demand for labor in the private sector. Note that subsidies include not only direct transfers in the form of money or in kind to such establishments, but any other benefits or privileges extended to them. For example, in the Philippines numerous tax incentives, such as preferential access to duty free imports, are available to hospitals that engage in teaching. Certification of medical schools and official recognition of their qualifications can be used to control the quantity and quality of output from both public and private schools.

Governments regulate the curricula and standards of private medical education. Public authorities also determine the output of public graduates, because of fiscal and manpower policies, which affect the demand for private education. Private training institutions may still be able to respond to unmet demand for private medical care, by increasing output.

When governments finance public facilities to train personnel who go on to work in the private sector, governments are also implicitly subsidizing the private sector. Requirements for newly qualified personnel or recently trained specialists to serve in the public sector influence the numbers of personnel available for private provision.

When sufficient numbers are available to work in the private sector, problems may still occur in the distribution of doctors geographically or across facilities or specialties. Even unemployment or underemployment may be insufficient to encourage doctors to enter private practice in underprovided areas. Possible policies to deal with this include targeted subsidies to private doctors working in underserved areas, modifications to the selection procedures used for entrance to medical schools so as to enroll those who are more likely to do so, and efforts to familiarize doctors during their training with the possibilities available for private practice.

#### 6.2.1.2 Capital

The importance of capital as a constraint to the development of private health services varies, being more likely in the case of hospital and clinic services. Governments can influence the supply of capital through directly providing investment funds, subsidies, tax policy, and credit controls, and through managing direct foreign investment.

Direct government subsidies or indirect subsidies (e.g., preferential credit allocations, access to limited foreign exchange, tax exemptions) serve to both reduce the risk and increase any eventual rate of return. They have been used occasionally used to help expand private services selectively. In Thailand the Board of Investment and the Ministry of Public Health have encouraged private investment in private hospitals through various tax privileges. These were ostensibly to reduce the pressure on government beds and thus improve access for the poor (ADB, 1987; Cohen, 1989). The Development Bank of the Philippines similarly provided special loans for private hospitals during the 1970s (Griffin and Paqueo, 1987). More recently, Sri Lanka's Board of Investment has also offered considerable tax concessions to both domestic and foreign investors building large hospitals in urban areas (Trade Media Ltd, 1992, 44-49). While the first two schemes seem to have had some success, further research needs to be done to investigate the actual impact they had, separate from other trends. This kind of incentive remains relatively underexploited as a form of public action, although USAID's "Cost Recovery for Health" project in Egypt has as one of its main components development of a guaranteed credit scheme for young doctors, to assist with the start-up costs for private practices, in the hopes that this will alleviate some of the pressure for public sector jobs among recent medical graduates.

#### 6.2.1.3 Technology, Equipment and Supplies

There are a number of incentives that governments can use to increase the supply of technology and equipment. Such inputs are usually imported and can be encouraged through the use of preferential import quotas, preferential access to rationed foreign currency, and exemptions from import duties.

Other than these measures, the inflow of new technology will be largely determined by the demand for it within the health care sector, both public and private. This demand is partly set by providers themselves, especially doctors, and depends on the economic return from the acquisition of new equipment. The economic incentives for individual providers to acquire new equipment are mostly determined by the nature of competition in the health care market and the type of payment mechanism. If insurance is an important method of financing, then attention should be paid to the fee-setting mechanism (see *Section 5.0*).

As in other sectors the rate of technology transfer or diffusion in the health care sector is strongly influenced by the level of educational development in the sector. Since the level of education is largely determined by government interventions in the labor supply market, policymakers should be aware of the spillover effect of improved medical education in terms of its increasing the potential for technology acquisition. In some developing countries, an increase in the technological capability of the health care sector may be viewed as desirable because of a need to improve and technically

upgrade the quality of care. However, in others, especially low-income countries, it may be viewed as undesirable because of its effect on costs and resource distribution. This latter situation illustrates how the health care market often behaves differently to other sectors. While investment in education is generally beneficial in developing countries, because of its multiplier effects on technology diffusion and thus productivity, in the case of medical care it may have the opposite effect. Governments should carefully judge the types of specialist medical training that they invest in.

In some countries there is significant domestic production of medical equipment, and, in a larger number of countries, production of pharmaceuticals. Government efforts to promote the development of industries related to the health care sector may conflict with other health policy goals, such as cost containment or efficiency. This has been a particular issue in the area of pharmaceuticals. For example, India has encouraged domestic production of drugs by establishing policies that foster proliferation and consumption of large numbers of medically inappropriate and expensive drug combinations.

### **6.2.2 Regulation and Licensing**

Regulation represents an alternative method of altering the constraints under which private providers must operate and thus the market for private services. Regulation can seek to influence price, quantity, and quality. Historically, regulators in developing countries have been unimaginative and blunt in their approach. However, it should be noted that effective regulation of the private sector will usually depend on adequate information on the private sector and its internal dynamics, and on sufficient administrative resources and commitment to develop and then implement regulations affecting the private sector. In most cases, this implies that time and effort must first be invested in creating the necessary capacity to carry out such tasks.

An important example of ineffective regulation involves the complete restrictions on private practice by physicians that many countries have introduced. In practice, these types of policies have had little success (WHO, 1991, 26). In the context of high demand, lax enforcement, doctors' often considerable political influence and their monopolistic market power, doctors can often ignore such restrictions with impunity or find alternative methods of bypassing such restrictions. Such policies thus may not be effective unless they are backed up by sufficient economic incentives for doctors to remain in the public sector as well as a strong administrative apparatus. In recent years, many countries faced with such realities have moved to relax such restrictions; examples include Sri Lanka, Tanzania, and Mozambique (McInnes et al., 1992).

Historically, in many countries permission for public sector providers to work privately part-time may have been important as an intermediate step in the transition to larger scale private provision by formal providers. By providing providers a basic income, facilities, and contact with potential consumers, public employment can act as a form of subsidy for private providers. This is especially crucial, when demand for private provision is not sufficient to support many full-time private providers, or the individual provider full-time.

#### 6.2.2.1 Prices

Prices can be regulated by directly fixing fee levels for private providers or by regulating provider payments through third parties. The former method is rarely used. The latter approach is easiest when the government or other statutory bodies have control over the financing mechanism, usually with social insurance or through legislation affecting private insurance. Otherwise it may be difficult to ensure private providers' adherence to official fee schedules.

#### 6.2.2.2 Quantity and Distribution of Private Services

The quantity of private services can be controlled through intervention in input markets and the demand side of the market or through regulation of the establishment of private facilities. Regulation of private sector output is also possible. Payment mechanisms can again be used to control the output of individual providers by limiting practice size (e.g., in capitation systems) or creating the appropriate incentives to reduce overtreatment or excessive prescribing.

The distribution and location of private providers are often of major concern. Regulatory approaches to controlling distribution and location include the licensing of new facilities. New facilities can be allowed only in areas where they are thought to be desirable. This type of intervention is probably more applicable to clinics and hospitals than individual practitioners. Within large institutions, the acquisition of equipment and new technology can be controlled also through a process of assessment and licensing.

#### 6.2.2.3 Quality aspects

Licensing and regulation are probably of most importance in the case of quality, as this is the one area where consumer ignorance can result in considerable market failure. This is of greatest relevance to standards of technical quality, as providers face considerable incentives to improve consumer-perceived quality (see *Section 5.0*). Governments will probably be most concerned about technical quality, but this is the least likely to be guaranteed through market forces. Therefore, it is with those aspects of technical quality least subject to evaluation by consumers that there are strongest arguments in favor of intervention by regulation.

In practice, there will be considerable difficulties in regulating technical quality. By its very nature, it requires expert judgment to assess, and such judgment may be limited in availability. Dealing with the more structural and process-oriented aspects of quality will be easiest. The licensing of facilities can be made contingent on suitable levels of quality of basic amenities, staffing, and service. For this to be effective, there must be sufficient ability to monitor and inspect providers, as well as a legal framework in which compliance and cooperation can be ensured. But in many countries, although licensing requirements exist, they are not enforced or checked.

Quality in terms of clinical outcomes is much more difficult to assess and regulate. The quality of individual practitioners is often in theory controlled through professional organizations. The effectiveness of such self-policing arrangements may vary considerably. Professional organizations may also be weak or non-existent in many countries, or incapable of carrying out a regulatory function. Alternative methods may be difficult to implement without the cooperation of providers. The practice of peer review and medical audit is generally limited outside the United States and some European countries.

## 7.0 INDIA: AN INITIAL EXPLORATION OF FACTORS AFFECTING THE DEVELOPMENT OF PRIVATE PROVISION

India is a low-income developing country, with a GNP per capita of \$350 and a population of 850 million in 1990 (World Bank, 1992a). This country represents a particularly interesting example of private health care development, as health is a devolved subject under the country's federal structure, which allows for considerable differences among states in their policies towards the health care sector. While the state has admitted a primary duty to improve the public health, private provision has existed alongside public provision since before independence in 1947.

The central government provides a broad national planning framework, within which the State governments have a major responsibility for actually developing and implementing state-level health policies. The National Health Policy (Government of India, 1982), recognizing that the central and state governments faced considerable financial constraints in providing adequate health care services, recommended that the states should seek to encourage the development of private health care provision. However, neither central nor state governments have responded to this policy goal with a specific agenda or action. While the level of private sector activity has grown considerably since 1982, the extent of such activity varies greatly across the states. The exact reasons for this variation remain unclear. Nevertheless, it offers considerable opportunity for research examining the dynamics of private sector development under differing conditions. In some recent work, Bhat (1991, 1993) has attempted to investigate this variation, but this work remains exploratory in nature.

### 7.1 PRIVATE HEALTH CARE PROVISION ACROSS THE STATES

Before analyzing the causes of variation in private sector activity, it is helpful to describe private provision and its variation. There are a number of possible sources of routinely collected information available in India that can be adapted for this purpose. These sources include data on hospital facilities and beds collected by the Central Bureau of Health Intelligence (CBHI), household and medical utilization data from the various rounds of the National Sample Survey (NSS), and data from other surveys of providers or health care utilization carried out from time to time. There are, as is usual, numerous deficiencies with each of these data sources. Officially reported health services data originates at the state level, and there is considerable opportunity for inconsistencies to occur in the definitions of categories used by individual states. Officially defined categories are often also incomplete; for example the CBHI hospital data excludes the smallest hospitals (which are called nursing homes in India). In the case of sample survey data, there can be problems with the sampling frame or survey instrument used. The health component of the NSS should have dealt with many of these problems, but it suffers from considerable underestimation of medical service utilization rates and thus expenditures.

Table 6.1 gives some provisional data on a number of measures of private sector activity in the different states.<sup>4</sup> Some of these describe better the demand side of the market, such as per capita expenditure on private hospitalization, while others reflect the supply side, such as the number of available hospital beds. Some of these measures were previously used by Bhat (1993). They generally involve the percentage of facilities or beds in the private sector. While these are of some value, such percentage measures depend not only on the level of private provision but also on the level of public provision. For the purpose of analysis, this complicates matters, as the variables then reflect two different and partially independent processes. Use of measures, such as the population-adjusted rate of hospitalization in private hospitals, may be more meaningful for this type of work. Most of the variables given refer to the hospital sector. Unfortunately, there is a paucity of good data available on ambulatory care at this time.

Table 6.2 then ranks the states in descending order of private sector activity according to each of the measures. Table 6.2 only shows those larger states, for which relatively complete data sets were available. It is apparent that, despite the quite different measures used, some states tend to cluster at the upper end of the table, while others lie at the lower end. This can be used to classify the states into three groups, according to the level of private sector activity, as shown in Table 6.3.

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<sup>4</sup> The data discussed and used in this section are drawn from a number of different sources, with estimations made where necessary. Because of differing definitions, samples and time periods used by each source, different measures may not always be strictly comparable. However, an effort has been made to use data from the late 1980s, and to standardize according to estimated population numbers when possible.



**TABLE 6.1: India - measures of activity in the private health sector by state**

	OUTPATIENT TREATMENTS TAKEN IN PRIVATE SECTOR		HOSPITALIZATION IN PRIVATE HOSPITALS			EXPENDITURE ON PRIVATE INPATIENT TREATMENT			* PRIVATE HOSPITAL BEDS		* PERCENTAGE PRIVATE INPATIENT TREATMENT	
	% of total		Cases per 1000 capita per annum			Rs. per capita per annum			Per 100,000 capita	% of total	% of all cases	
	RURAL	URBAN	RURAL	URBAN	TOTAL	RURAL	URBAN	TOTAL			RURAL	URBAN
MAJOR STATES												
Andhra Pradesh	81.08	79.45	25.02	9.68	21.44	13.16	5.96	11.48	17.9	30.5	65.22	37.98
Assam	46.99	70.40	1.37	1.49	1.38	0.59	2.54	0.79		21.65	7.56	79.88
Bihar	83.16	82.37	3.92	0.09	3.44	2.89	0.06	2.53	10.5	30.19	27.01	44.69
Goa, Daman, & Diu	44.48	47.28							109.2	40.71	17.70	61.71
Gujarat	67.58	84.14	8.10	4.23	6.90	6.28	5.41	6.01	68.9	52.72	42.80	59.21
Haryana	83.10	83.00	10.01	8.38	9.66	11.55	8.31	10.84	19.1	37.29	31.95	55.31
Himachal Pradesh	39.33	52.29	2.31	4.24	2.45	2.17	1.39	2.11	9.8	10.94	8.89	77.13
Jammu & Kashmir	41.21	52.96	0.72	0.40	0.65	0.64	0.79	0.68	1.9	1.84	2.60	93.23
Karnataka	64.54	70.06	8.80	7.23	8.35	9.87	9.11	9.65	18.7	22.65	32.94	48.51
Kerala	65.86	64.31	41.80	16.30	37.02	18.16	9.63	16.56	160.3	60.15	53.40	54.77
Madhya Pradesh	69.11	69.59	2.42	0.67	2.06	1.81	0.42	1.53			14.80	76.01
Maharashtra	74.11	75.85	4.77	3.04	4.16	4.60	6.27	5.18	49.7	38.55	53.38	45.74
Orissa	48.02	53.55	1.61	1.90	1.65	0.88	1.30	0.93	3.8	8.73	6.36	78.94
Punjab	87.46	89.85	25.52	13.00	22.05	33.10	20.82	29.70	25.7	22.05	47.14	48.37
Rajasthan	44.56	42.79	3.04	0.70	2.55	1.85	0.36	1.53	5.3	10.04	13.16	84.98
Tamil Nadu	63.81	67.43	13.23	0.61	9.07	9.64	0.70	6.70	18.3	20.74	39.11	57.74
Uttar Pradesh		84.07	6.15	2.20	5.44	6.40	2.59	5.72	10.3	25.44	27.26	57.97
West Bengal	80.55	79.16	0.66	2.55	1.16	0.79	5.98	2.17	10.2	12.09	1.43	72.64
OTHER STATES												
Chandigarh	89.05	76.1								0	8.79	92.89
Delhi	66.04	60.62								20.56	18.84	70.15
Lakshadweep	15.38	7.21								0	30.01	70.29
Manipur	29.78	38.56							4.4	5.26	17.72	91.66
Meghalaya	57.00	73.98							38.6	29.83	17.58	51.68
Mizoram	14.54	27.78							62.8	33.15	0.85	91.39
Pondicherry	43.02	30.98							22.4	6.15	15.56	85.68
Sikkim										0	0.00	91.75
ALL INDIA	74.8	74.5	8.82	4.53	7.81	6.92	5.84	6.67			31.99	59.51

Source: Government of India (1989), Bhat (1991b), CBHI, plus own estimates. Note that data is not available for all states.

**TABLE 6.2: Indian States ranked according to measures of private sector activity**

RANKING	OUTPATIENT TREATMENTS TAKEN IN PRIVATE SECTOR		HOSPITALIZATION IN PRIVATE HOSPITALS			EXPENDITURE ON PRIVATE INPATIENT TREATMENT			PRIVATE HOSPITAL BEDS		PERCENTAGE PRIVATE INPATIENT TREATMENT	
	RURAL	URBAN	RURAL	URBAN	TOTAL	RURAL	URBAN	TOTAL	RURAL	URBAN	RURAL	URBAN
1	PUN	PUN	KER	KER	KER	AP	PUN	PUN	KER	KER	AP	JK
2	BIH	GUJ	PUN	PUN	PUN	PUN	KER	KER	GUJ	GUJ	KER	RAJ
3	HAR	UP	AP	AP	AP	KER	KAR	HAR	MAH	MAH	MAH	ASS
4	AP	HAR	TN	HAR	HAR	HAR	HAR	KAR	PUN	HAR	PUN	ORI
5	WB	BIH	HAR	KAR	TN	KAR	MAH	TN	HAR	AP	GUJ	HP
6	MAH	AP	KAR	HP	KAR	TN	WB	GUJ	KAR	BIH	TN	MP
7	MP	WB	GUJ	GUJ	GUJ	UP	AP	UP	TN	UP	KAR	WB
8	GUJ	MAH	UP	MAH	UP	GUJ	GUJ	MAH	AP	KAR	HAR	GUJ
9	KER	ASS	MAH	WB	MAH	MAH	UP	BIH	BIH	PUN	UP	UP
10	KAR	KAR	BIH	UP	BIH	BIH	ASS	WB	UP	ASS	BIH	TN
11	TN	MP	RAJ	ORI	RAJ	HP	HP	HP	WB	TN	MP	HAR
12	ORI	TN	MP	ASS	HP	RAJ	ORI	RAJ	HP	WB	RAJ	KER
13	ASS	KER	HP	RAJ	MP	MP	JK	MP	RAJ	HP	HP	KAR
14	RAJ	ORI	ORI	MP	ORI	ORI	TN	ORI	ORI	RAJ	ASS	PUN
15	JK	JK	ASS	TN	ASS	WB	MP	ASS	JK	ORI	ORI	MAH
16	HP	HP	JK	JK	WB	JK	RAJ	JK		JK	JK	BIH
17		RAJ	WB	BIH	JK	ASS	BIH	AP			WB	AP

Sources as in previous table. Note that only selected States are ranked. The following abbreviations are used: AP - Andhra Pradesh; ASS - Assam; BIH - Bihar; CHA - Chandigarh; DEL - Delhi; GOA - Goa, Daman, & Diu; GUJ - Gujarat; HAR - Haryana; HP - Himachal Pradesh; JK - Jammu & Kashmir; KAR - Karnataka; KER - Kerala; MP - Madhya Pradesh; MAH - Maharashtra; MAN - Manipur; MEG - Meghalaya; MIZ - Mizoram; ORI - Orissa; PON - Pondicherry; PUN - Punjab; RAJ - Rajasthan; TN - Tamil Nadu; UP - Uttar Pradesh; WB - West Bengal.

<b>TABLE 6.3: Some Indian States, Grouped According to the Level of Private Health Care Activity</b>		
<b>LOW</b>	<b>INTERMEDIATE</b>	<b>HIGH</b>
Assam Bihar Himachal Pradesh Jammu & Kashmir Orissa Rajasthan West Bengal	Karnataka Madhya Pradesh Maharashtra Tamil Nadu Uttar Pradesh	Andhra Pradesh Gujarat Haryana Kerala Punjab
<i>Note:</i> Only those states for which there were relatively complete data sets have been included.		

## 7.2 RESULTS OF MULTIVARIATE ANALYSIS

On the basis of the data we had available, we made some preliminary efforts to estimate multivariate models of the determinants of the level of private provision of hospital beds across Indian states. One of these is presented below in Table 6.4, as an example. The regression results suggest that provision of public hospital beds negatively affects the supply of private hospital beds, i.e. that there is some substitution between them. General public sector health expenditure seems to have a positive correlation with private hospital development, however. Formal sector employment, which could be a proxy for coverage with India's ESIS (social insurance for industrial workers) scheme has a negative coefficient, possibly reflecting increased use of the government-owned ESIS hospitals. These preliminary findings at least confirm the potential for identifying policy-relevant variables affecting private provision and for sorting out some of the interactions with other social and economic factors.

**TABLE 6.4: Variation in Private Hospital Bed Numbers Across Selected Indian States—Results of Multivariate Analysis**

<b>Variable</b>	<b>Private Hospital Beds (per capita)</b>
$\alpha$	-84.19 * (16.947)
<b>Per Capita Income</b> (rupees per annum)	0.005 (0.006)
<b>Literacy</b> (% of adult population)	3.988 * (0.538)
<b>Formal Sector</b> (% of population in formal employment)	-17.506 * (7.214)
<b>Public Expenditure on Health</b> (rupees per capita per annum)	0.316 (0.114)
<b>Public Hospital Beds</b>	-0.316 (0.072)
$R^2$	0.903 (20.52)

*Note:* For each of the independent variables, the estimated beta coefficient in the regression equation is given, with the standard error listed underneath. An asterisk (\*) marks those variables which are significant at the 5% level(2-tailed). The total number of states included in the analysis, N, was 17.

## APPENDICES:

### INTRODUCTION TO THE CASE STUDIES

The following four case studies describe the development of private health care provision in four different countries. They are meant to illustrate some of the factors and issues discussed in the main text. However, they are not meant to be representative of the experiences of all countries, since the countries chosen are not necessarily typical of the majority of countries in the world. Nevertheless, the applicability of the framework of analysis proposed above to all these cases does indicate that it is relatively generalizable.

The actual choice of countries was largely dictated by the quantity of material available in the literature that could be used for analysis. One of the major findings of this study, which included an exhaustive review of both the published and unpublished literature, was the relative paucity of analytical material on the private health care provision sector in developing or developed countries. The four countries discussed are almost the only ones for which sufficient material was available to carry out a comprehensive analysis of any depth, other than the United States. That material was available on these four countries in adequate quantities is largely a result of the fact that the situations described were rather unusual and have thus been the subject of more than an average level of scholarly interest.

## APPENDIX A: PAPUA NEW GUINEA

Comprising the eastern half of the island of New Guinea, and located at the western edge of the Pacific Ocean, Papua New Guinea (PNG) gained independence from Australia in 1975. The predominantly rural population of 3.7 million is scattered across 460,000 square kilometers. Much of the economy is subsistence level, with a growing, but relatively unintegrated, modern export-oriented sector based on mineral exploitation and cash crop cultivation. With a GNP per capita of US\$860 in 1990, PNG was classified as a lower-middle-income country, but its income per capita in 1990 international dollars was only 1,500, lower than that of Pakistan (World Bank, 1992a). (This discussion of Papua New Guinea has benefited from the kind assistance and advice of Drs. Iain Aitken [Harvard School of Public Health] and Riitta-Liisa Kolehmainen-Aitken [Management Sciences for Health] and Ms. Jane Thomason [Asian Development Bank], and this is gratefully acknowledged.)

The geographical context in which health services must be delivered is among the most difficult in the world, with a rugged terrain and very low population density (8 per square kilometer), associated with a culturally diverse population. The remoteness of much of the country from the external world has meant that the extension of modern medical services to the population has been largely due to the efforts of government and church missions. Without such activity there would have been no effective economic demand for unfamiliar modern services. Second, the unit costs of services will inevitably be high given typical conditions, and a low population density means that what demand does exist is unlikely to be particularly great at any point; i.e., the barriers to market entry are high, and the potential rate of return for private services low.

The existence of a modern primary commodity exporting sector has enabled the government to have access to relatively high revenues (20 to 25 per cent of Gross Domestic Product [GDP]), despite an otherwise tiny formal sector and limited economic development. It has used these revenues to support considerable expansion of the health system. Not only has public health spending as a proportion of total health expenditures been relatively high in comparison with comparable countries, ~88 per cent in 1986 (Thomason and Newbrander, 1991), but also as a proportion of GDP, rising from 2.8 per cent in the late 1970s to 3.4 per cent in the early 1980s (World Bank, 1991).

Not unexpectedly in the circumstances, the private sector has historically been small and restricted to the resident expatriate workforce. The established church services must be regarded as essentially public sector, as they are subject to considerable official regulation and administrative control, as well as direct subsidies. However, in recent years the private sector has shown rapid growth and now caters to a large number of Papua New Guineans. The private sector is mostly providing fee-for-service ambulatory services to the urban and peri-urban population, and the extent of hospital provision is small. The reasons for the private sector's expansion are not immediately apparent, as per capita income growth in the 1980s has been negative overall. However, closer analysis reveals that there have been some relevant changes on both the demand and supply sides.

GNP changes are particularly liable to mislead in the case of PNG owing to the enclave nature of its modern mineral exporting sector. Falls that have occurred in this sector have not directly affected incomes in the remaining economy. Thus the impact of falls in output on demand for personal services has been limited. While a reduction in export revenues has forced a fiscal crisis, and reductions in government expenditures in real per capita terms (-1.8 per cent between 1986 and 1990), it is not clear that this has been a significant factor, since growth in the private sector predates this.

Meanwhile, the transport infrastructure has improved, and the urban population, the main user of private services, has increased. The level of education is strongly correlated with the use of private services. Increasing education has reinforced a growing familiarity with modern medical services. What is notable is the increased number of PNG nationals using private services, which rose from 15 per cent of all private patients in 1974 to at least 50 per cent in 1984 (Kolehmainen-Aitken et al., 1990). Increased access and sociocultural change, partly brought about by previous government intervention, must have been significant on the demand side. PNG is possibly one of the clearest examples of how the initial provision of medical services by the state independently generates over time an increased demand for such services as well as for higher quality.

On the supply side, there has been an improvement in the labor supply to the private sector, particularly with respect to physicians. Our proposed framework would suggest three possible relevant predeterminants:

- ▲ Output of local doctors
- ▲ Public-private wage differentials
- ▲ Availability of employed positions in the public sector

Historically, medical personnel were expatriates, either in official employment or working for NGOs. Some of these engaged in private practice, but this was limited in extent, probably for the non-economic factors mentioned above. This practice was restricted also to expatriate patients. If we take the number of PNG nationals in the workforce as being the critical variable, there have been considerable changes since the establishment of PNG's only medical school some thirty years ago. The proportion of physicians in private practice who are PNG nationals increased from zero in 1973 to 78% in 1989 (Kolehmainen-Aitken et al., 1990; Mulou et al., 1992). The increase in overall numbers of private physicians from 35 in 1984 to 61 in 1989 was accounted for completely by the increase in the number of PNG nationals.

Large income differentials between public and private sectors exist and are estimated to be two- to three-fold (Thomason, 1992). In surveys, doctors admit these to be the main motivation for entering private practice (Kolehmainen-Aitken et al., 1990). It would appear that nonmonetary benefits of employment are not sufficient to compensate for low salaries, as doctors also cite lack of housing, poor working conditions, and lack of educational subsidies as deterrents to remaining in the public sector. Levels of compensation in the government service also appear to be low in comparison to other areas of the labor market. The number of persons applying to the medical school has always been less than the

number of places available. This appears to be related to the greater attraction of careers in commerce and other sectors.

However, the rise of private practice and the recent accelerated exodus from the public to the private sector cannot be adequately explained by the above factors. There has been no shortage of official positions, as the public sector remains able and actively committed to adequately employing all medical graduates. Closer analysis reveals that although public employment is ensured, the number of hospital specialist positions is restricted. These positions are the ones that more junior medical staff aspire to and are linked with the right and potential to earn considerable additional private income. What may have happened is that many junior doctors realized in the 1980s that the considerable sacrifices undergone during the years of training would no longer guarantee them a specialist position at the end of the day, and that private practice offered a much greater assurance of higher incomes at an earlier point in their careers. While leaving the public sector was almost unknown in the 1970s, by 1989 7 out of 15 doctors completing their residencies left the government sector (World Bank, 1991). This suggests that when manpower planning is undertaken it is necessary to look at more than mere employment numbers, and instead at the future distribution of personnel across grades.

Up to now the role of health insurance has been small. While Papua New Guineans with medical insurance are more likely to choose private over public care, the number of private patients with insurance is only about 15 per cent (Mulou et al., 1992). Overall, only 25,000 Papua New Guineans in 1992 were estimated to be covered by private medical insurance (Thomason, 1992). However, the number of insurance agents in the market has increased in recent years, and private voluntary health insurance is being marketed to the majority of the formal sector workforce, estimated at 150 to 160,000. This should be expected to increase demand for private services, and thus also the exit of doctors to the private sector.

The present fiscal crisis that the PNG government faces is likely to continue in the medium term. Since it seems unlikely that the government will be able to continue the high levels of budgetary support of the health services that it has in the past, there will be considerable pressure to increase the level of cost recovery through higher user fees. This option is, in fact, being examined. If this is eventually realized, then the price differentials between the two sectors will fall, and demand for private services will grow.

In this context of growing private services, it should be expected that the government will attempt to take a more active position toward the private sector in terms of control and regulation. Since repressing private activity is unlikely, cooperating with and harnessing the private sector is a more probable and preferable option. In the case of private physicians, this is pertinent, since many are apparently willing to work part-time in the public sector if paid to do so (Kolehmainen-Aitken et al., 1990).



## APPENDIX B: REPUBLIC OF SOUTH AFRICA

The Republic of South Africa (RSA) is a lower-middle-income developing country located at the southern tip of Africa. It is unusual because of the apartheid policies pursued by the ruling regime since the 1950s, following independence from Britain. These policies involved considerable social and market distortions and interventions, and the consequences of these have been reflected in virtually all areas of social and economic development, including the health care sector. While the present health financing arrangements and those that are likely to evolve in the coming years will reflect this inheritance, it is also clear that the country faces many of the same problems and issues regarding the public-private mix as any other country. Despite the impact of apartheid, the analytic framework proposed in this paper can also be applied without modification to analysis of South Africa's private health services. Given that there are few countries with more unusual social and economic arrangements, it is indicative of the universality of many of the determinants included in the framework. (*In discussing the health care sector in South Africa it is necessary to use various terms such as "Black," "Colored," "Indian," and "White." Their use does not imply that we accept the legitimacy of such terminology.*)

At the present time the structure of the health services in the RSA is highly complex, because of the various administrative regions and structures created during the apartheid years. In summary, the public sector is predominant and employs about 50 per cent of all doctors and 75 per cent of all nurses in a salaried health service, which provides free or subsidized care to all groups. User charges are levied in public hospitals on the basis of informal means tests, and total private expenditures are estimated to be 45 per cent of total spending. Excluding various nonprofit facilities, approximately 12.5 per cent to 20 per cent of all hospital beds are estimated to be in the private sector. Payment can be out-of-pocket, but is usually by private health insurance. These are termed either medical aid schemes or medical benefit schemes. The former are more generous and pay according to a fee schedule set nationally by a statutory body, the Representative Association of Medical Schemes (RAMS), after consultation with the private hospital sector (Naylor, 1988).

### CHANGES IN OFFICIAL POLICY

As in most other anglophone African countries, the predominantly publicly provided services have a long history. In 1944 the Gluckman National Health Services Commission proposed the development of a comprehensive publicly provided health service, not too dissimilar in its broad vision to that of other commissions in other British or ex-British colonies around that time (e.g., Bhole in India, Jennings in Sri Lanka, Beveridge in Britain). Although, as in many cases the vision was never realized, the government did take upon itself the responsibility for providing most health services in the country. Official policy remained dismissive of and hostile to the private sector until the late-1970s, when both policy changed and the private sector began to increase in size.

The reasons for the dramatic policy change were of the same generic types seen elsewhere, as follows:

- ▲ **Fiscal constraints.** This was freely admitted to by the government. Demand was increasing for various reasons, but because of economic mismanagement, per capita income growth was low or negative, which was causing increasing fiscal difficulties.
- ▲ **The Need to Increase Medical Services to Politically Important Constituents.** In the 1980s, the government attempted to strengthen its political base by coopting black urban workers by improving their social conditions. The shift towards privatization was quintessentially part of this trend (Price, 1986 and 1989).
- ▲ **Ideological Shifts.** The greater reliance on the private sector was partly influenced and encouraged by the broad shift in most Western nations in the 1980s towards more market-oriented economic and social policies.

From the late 1970s to the mid-1980s, the South African government went from a policy of merely recognizing the contribution of the private sector to actively encouraging a process of privatization. It pursued three major approaches in trying to achieve this:

- ▲ Reducing subsidies for public provision in favor of providing subsidies for private financing
- ▲ Introducing and raising the level of public sector user fees
- ▲ Deregulating the private health insurance market, removing a 20 per cent maximum limit on copayments

However, while these represent the political and regulatory environment under which subsequent expansion of the private medical sector has apparently taken place, they are not sufficient to explain it. This expansion must be seen as primarily demand driven, with supply factors playing only a minor role.

## INCOME GROWTH

Income growth is usually the key determinant on the demand side. In this case per capita income growth was low if not negative (Table B1). On the other hand, there were two significant trends during this period, which again illustrate the importance of examining disaggregated figures: the numbers of non-whites entering formal employment in urban areas increased, which is important because it expanded the potential demand for private services; and this increase has been translated into significantly increased actual demand, as it has been associated with increasing levels of unionization and union assertiveness. Employee pressure for health insurance benefits has influenced both employers and union negotiators alike. While average incomes have remained unchanged, real wages for this sector of the work-force have been rising rapidly.

<b>Table B-1: Republic of South Africa GDP per Capita in Constant 1985 Rands</b>	
Year	Rand
1977	3798
1978	3818
1979	388
1980	4195
1981	4194
1982	4087
1983	3924
1984	4036
1985	3900
1986	3815
1987	3809
1988	3878
1989	3872
<i>Estimated from data in IMF (1991)</i>	

## HEALTH INSURANCE

Insurance coverage has increased. By the 1970s, insurance coverage had stabilized at approximately 70 to 75 per cent of the white population, which limited the potential for its expansion. However, the number of nonwhites covered more than doubled during 1977-1986 (Table B-2). Although the level of coverage among nonwhites remains relatively low, the long-term potential for expansion remains high.

<b>Table B-2: Growth in Private Insurance Coverage in South Africa</b>			
	1975	1980	1985
<b>% Whites Covered</b>	74.8	79.1	86.8
<b>% Blacks Covered</b>	2.6	4.6	7.6
<b>% Total Population Covered</b>	14.7	15.9	19.2
<i>Taken from Naylor (1988)</i>			

## PRICE AND QUALITY DIFFERENTIALS

Public care in the RSA was traditionally subsidized, and thus cheaper than private. However, the level of public sector user fees has risen, reducing price differentials. In addition, eligibility for subsidized rates is means tested, and as formal employment has grown the number of nonwhite workers earning enough to be ineligible has increased. For many such workers, public care is now more expensive than private care.

Publicly provided health services have long been underfunded, especially for nonwhites, and therefore levels of quality have either deteriorated or always been at low levels. This, plus the segregated facilities found in public hospitals, have encouraged many non-whites to seek private care.

## SOCIOCULTURAL FACTORS

Increasing urbanization among nonwhites and rising educational levels have been associated with greater demand for private services. This reflects not only a greater demand for all health services, but also a greater concern for quality.

## SUPPLY-SIDE DETERMINANTS

Supply-side determinants seem to have been far less critical, although important in some respects. Doctors, nurses, and other medical staff are trained in the public sector and tend to be predominantly employed in that sector. Nevertheless, significant income differentials between the public and private sectors exist, of the order of 70 per cent to 100 per cent in the case of doctors, which encourages many to shift to the private sector. This has

resulted in approximately 20 per cent of medical positions in the public sector being unfilled and in damaging shortages of nursing staff.

While, overall, the RSA is short of doctors, many places in the RSA are over-supplied with doctors. Historically, nonwhite tertiary and medical education were greatly restricted, and most physicians were white. By 1980, of the 15,663 doctors registered in the RSA, 200 (1.3 per cent) were African, 350 (2.2 per cent) were colored, and 1,200 (7.7 per cent) were Indian (Naylor, 1988). This led to a situation in which while there were often too many doctors in white areas with too little work (the doctor-population ratio was 1:190 for whites in Durban), they were usually reluctant or unable to work in nonwhite areas, for linguistic, cultural, and economic reasons. The supply of private physicians to predominantly nonwhite areas was thus always limited, and is only now being eased with the increasing numbers of nonwhite medical graduates.

Private hospitals in South Africa were historically owned by churches or by groups of physicians, but as they have become more capital-intensive, companies and other investors have become more important (Thomson, 1984). Although this does represent an increase in the potential sources of start-up capital, of far greater importance has been the more tolerant attitude of the state to such investments and other factors affecting the rate of return in the industry.

## FUTURE PROSPECTS AND TRENDS

Clearly the nature and extent of private health care provision in the country will be largely influenced by the major changes in the social and economic fabric that are now taking place, in particular the future rate of economic growth. Although these are presently unclear, it is possible to make some comments on the basis of current trends.

Long-term expansion of the sector will depend increasingly on insurance coverage. While it is difficult, as in most other countries, to know and interpret figures on private health care spending, it seems likely that there has been a real increase in per capita private health expenditures during the 1980s, which has involved an increase by members of medical schemes and a corresponding decline by nonmembers (Taylor and Kloppe, 1987; Naylor, 1988; McIntyre and Dorrington, 1990). However, expansion of insurance coverage is inherently limited in the longer term by the small size of the formally employed sector, which is likely to be the case for the foreseeable future. Price (1988) notes that medical scheme coverage is unlikely, for these reasons, to exceed even 50 per cent of the economically active population by the year 2000. Even with growth in real income levels and increasing output of nonwhite physicians, private health care provision is unlikely to spread significantly to rural areas either, as the population density and income levels are far too low to create profitable opportunities for private practice in these areas.

Government policy aimed at deregulating the industry may also act to further restrict the long-term expansion of private insurance coverage. A greater degree of risk-rating by insurance schemes is now permitted. The rate of growth in coverage has slowed and has in fact fallen among whites from 87 per cent in 1983 to 68.4 per cent in 1988 (Broomberg et al., 1990). Competitive pressures will thus mean that insurance premiums will increasingly

correspond to actuarial risks (Broomberg, 1991). As the degree of cross-subsidization falls, the ability of low-income groups and dependents to access private services through health insurance will be limited.

On the supply side, cost escalation is seen by many South African analysts as being the major factor threatening future expansion in private services. As might be expected, increasing third-party payment has resulted in price escalation and also an increasing problem of supplier-induced demand. The current structure of the fee schedules encourages an emphasis on elective and semi-elective surgical and acute medical care, and on hospital over ambulatory care. Rates for basic room charges and operating time are generally according to the official schedule set by RAMS, and these have been kept below the rate of inflation in recent years. They are probably below actual costs for most providers, and so most hospitals attempt to recover their costs by making profits on the other items, such as drugs and operating-room materials.

In the case of general practitioners, the level and nature of drug reimbursement are also seen as being a key problem, as reimbursement encourages excessive and more costly prescribing (Price, 1990). This has led many observers to propose various measures to reduce this problem, which generally involve promoting more rational prescribing practices by clinicians and reducing the profitability of nongeneric prescribing (Boyce and Bartlett, 1990; Hukins and Boyce, 1990; Price, 1990). However, while such measures may have some effect on slowing the increase in costs, they will ultimately be limited in their impact. In the longer run, control of supplier-induced demand may only be attainable through some form of global budgeting, which is rarely feasible with a system of private insurance. In addition, emphasizing cost control of ambulatory providers may be misplaced if such emphasis reduces the profitability of ambulatory provision, and thus leads to a greater reliance on hospital care. The excessive prescribing of private practitioners in certain East Asian countries may be undesirable, but does appear to have had the advantage of promoting a more extensive and accessible system of private ambulatory care providers at the expense of more costly tertiary providers.

## APPENDIX C: CHILE

Chile is an upper-middle-income country situated in Latin America. In social terms it has been one of the more advanced developing countries. The Chilean state is one of the oldest public financiers of health care and other social services in the Americas. However, during the 1970s and 1980s under the Pinochet regime, an unusually deliberate and sustained attempt was made to change the whole socioeconomic structure in favor of a more free-market oriented system. These changes were primarily economic, but were also aimed at the health care sector.

Chile has a long history of the government taking responsibility for ensuring access to health care. Over the years the tendency was, as observed in most developed countries, for more direct government support and consolidation of the system. This process was, as elsewhere, not unrelated to the existence of largely democratic process of government. Starting with a social security and pension scheme for public railroad workers in 1918, a variety of social security funds were established in the 1920s to provide medical services for workers in the formal sector. These were then consolidated in the National Health Service (SNS), established in 1952. SNS was given the responsibility of providing preventative services for all the population, and free curative services to about 65 per cent of the population who were blue collar workers and indigents. It was financed by government contributions (60 per cent), social security transfers (20 per cent) and other fees (20 per cent) (Viveros-Long, 1986). In 1968, the National Medical Service for Employees (SERMENA) was established for white-collar workers and their dependents, who were approximately 20 per cent of the population. SERMENA was financed by payroll taxes, copayments, and eventually direct government subsidies. Members could choose between SNS and selected private providers for provision. In addition to these arrangements, the Armed Forces maintained a separate system of health services for their personnel and families, while the remaining upper 10 per cent of the population paid for their own care by the private sector.

### POST-1973 CHANGES TO THE HEALTH CARE SYSTEM

The military regime of Pinochet, which took power in 1973, attempted to bring about a radical restructuring of the Chilean economy and society along more free-market lines. It was characterized by a high degree of ideological coherence and, unlike previous regimes, was largely insensitive to social pressures. It was thus able to implement with unusual consistency and vigor a deliberate policy of encouraging increasing private sector activity in health care.

The whole system of health care financing was reorganized, and a four-tier system was set up in which payment mechanisms and public subsidies were related to income level. The SNS was transformed into the National Health Service System (SNSS), while SERMENA became the National Health Fund (FONASA). A much clearer distinction between the financing and provision of health care was also made. While most of the SNSS funds continued to be allocated to the various health regions according to the budget, an increasing proportion (16 per cent in 1979) was allocated according to the volume of health services provided, which was supposed to reflect actual demand. The choice of providers that had existed previously for SERMENA beneficiaries was increased to include

a much broader range of public and private providers and was extended, in theory, to SNSS members. SNSS services continued to be provided to members at no charge, but members could take a voucher and use any other provider, paying the difference themselves. FONASA-provided services were divided into three levels, paid for by vouchers. Each voucher represented an equal government contribution (about US\$3 in the early 1980s), but with differing levels of copayment, ranging from about 25 per cent to 50 per cent (Scarpaci, 1985). The remaining upper 10 per cent (by income) of the population were to continue to depend on the private sector for both financing and provision of health services. There was one other important modification: under Law Decree 3626 of 1981, employees could opt to pay their payroll deductions to Provisional Health Institutes (ISAPREs) instead of FONASA. The ISAPREs were somewhat similar to HMOs or other U.S. health plans, which combine financing and provider functions. They are private organizations, which were aimed particularly at the upper 10 per cent to 15 per cent income range, and designed to attract private capital into the health care sector as well as to reduce the state's involvement in financing. The new system was also supposed to allow patients to choose providers according to their own budgets and preferences, and to introduce a greater degree of market forces into the delivery of health care.

The changes described above provided the framework for greater private sector participation in the health care system and were accompanied by various other measures that should have encouraged a shift towards the private sector, both on the demand side as well as on the supply side. They will be briefly discussed according to the type of determinant.

## **Public Health Care Expenditures**

Overall public expenditures on health were drastically reduced following 1973 and until 1977, when they began to rise, but at a slower rate than the GDP growth rate. In addition, capital expenditures were drastically reduced. To some extent this did result in a shift to increased private expenditures, and there was much less change in the total level of health expenditures (Table C1). However, it should be noted that expenditures were in fact increased for primary health care and for certain selected services, such as maternal and child health.



<b>TABLE C-1: Health Expenditures in Chile, 1969-80 (millions of 1980 pesos)</b>				
<b>YEAR</b>	<b>TOTAL</b>	<b>PRIVATE</b>	<b>PUBLIC</b>	<b>% PRIVATE</b>
1969	26,708	14,089	12,619	53
1970	27,625	13,557	14,068	49
1971	21,666	11,134	10,532	51
1972	22,520	12,995	9,525	58
1973	23,019	14,210	8,809	62
1974	27,141	16,337	10,804	60
1975	29,161	18,344	10,817	63
1976	29,654	18,036	10,618	64
1977	31,709	20,945	10,764	66
<i>Source: Scarpaci (1985)</i>				

## Price Differentials

Widening the use of vouchers and the choice of potential providers for both SNSS and FONASA beneficiaries, in effect, served to reduce the price differentials between public and private providers from the viewpoint of the patient. However, the effect of this was minimal in the case of the poorer SNSS members, as the additional cost incurred in using private providers was still very great given their income level. In addition, increased queuing at public clinics, as reported by Scarpaci (1985), would also have represented an increase in nonmoney prices of care.

## Quality Differentials

The fiscal restraints on the public sector would have had the effect of reducing the overall level of quality of public services. In the longer run, reductions in capital spending, employee numbers, etc., would also be expected to have had similar effects.

## Labor Inputs

Reductions in the real level of wages (average salaries for the SNSS in 1975 represented only 54.4 per cent of those in 1970 in real terms) and the size of the public sector workforce should have encouraged a shift in health personnel to the private sector. In the case of physicians, limitations on the right to private practice in public hospitals would also have depressed their effective earning capacity in the public sector. Historically, 80 per cent of newly graduating doctors had been hired by the public sector, but this was reduced to about 25 per cent in 1982 (Table C-2).

<b>Table C-2: Chilean Medical School Graduates and Positions Reserved for them by SNSS</b>			
	<b>Number of Graduates</b>	<b>Number of Positions Reserved</b>	<b>Percentage (%)</b>
<b>Year</b>	(A)	(B)	(B/A)
1977	528	379	71.7
1978	617	321	52.0
1979	676	319	47.2
1980	640	326	50.9
1981	596	153	25.6
1982	662	160	24.1
<i>Source:</i> Based on Colegio Médico de Chile (1984), cited in Scarpaci (1988)			

This was seen by most physicians as a cause of their growing unemployment and seems to have forced many into the private sector, although it is difficult to quantify this. One measure of it was a 52 per cent increase in the number of private physicians advertising in the yellow pages of the Greater Santiago telephone directory (Scarpaci, 1985). However, although physician unemployment was deemed to be a problem, this did not mean that the supply of private physicians increased in all areas. As might be expected, many of the increased numbers of doctors located in the more prosperous areas of the cities, ignoring the underserved urban and rural areas. This can be partially explained on economic grounds and the higher incomes available in some areas, but is also a consequence of sociocultural factors affecting the distribution of doctors (Scarpaci, 1988, Chapter 5; Zschock, 1988).

## CONSEQUENCES AND CURRENT PROSPECTS

While these many changes did have an effect in terms of increasing private sector activity in the provision and financing of health care, the extent and nature of the impact were not exactly as desired initially. Private sector expenditures and utilization did rise, but probably not as much as expected.

The major reasons for this relate to changes in overall income levels and medical cost inflation. The whole program of reform was attempted at a time of drastically declining income levels in Chile, and thus the subsequent decline in effective demand for health services should not be unexpected and was probably as great as the actual reduction in public health care expenditures. Declining income levels were compounded by high medical cost inflation. Although the reforms envisaged that the increased action of competitive market forces would act to keep prices down, the actual effect of the structural changes was the opposite. By increasing the extent of cost-sharing by patients, especially low- and middle-income ones, the actual costs faced by the consumer increased and appear to have significantly reduced rates of utilization (Scarpaci, 1988).

The large increase in private sector activity that did occur appears also to have been concentrated in expansion of ambulatory care facilities (145 per cent in Santiago between 1975 and 1981, according to Viveros-Long, 1986). This was not necessarily what was expected, given the commitment to maintain public primary health care expenditures. In contrast, private hospital care, which was actively encouraged, did not expand greatly. Nor was capital investment in such facilities significantly greater. This is not necessarily any surprise, since it is precisely this segment of the sector that is most expensive from the point of view of the private consumer and thus was least likely to expand in the absence of very strong income growth.

In the longer run, much of this process can be seen to have been unsustainable, based as it was on an unusual set of political circumstances. While Chile has enjoyed very good economic growth since 1982, hospital services have remained largely a public sector activity (World Bank, 1992b). Furthermore, the elected civilian regime that eventually came to power does not share the same beliefs about the private sector's role in health care. While economic policy has remained largely unchanged, the new government is much more committed to expanding the role of the state in the social sector and, in the longer run, increasing public expenditures, both as a share of GDP and of total

health spending. The decline in public health care expenditure as a proportion of the total has already been reversed, and substantial increases in expenditure over the next 2 years have already been budgeted for (World Bank, 1992b). Perhaps, paradoxically, this has been made easier by the very success of the previous regime's macroeconomic and fiscal policies, which have allowed the government to run fiscal surpluses in the past 3 years, reaching 3.2 per cent of GDP in 1992 (Crawford, 1992). These policies enjoy a considerable amount of support within the country, and this maybe a reflection of a general tendency in the more socially advanced societies for government financing of health care to increase relative to that of private expenditures.

## APPENDIX D: UNITED KINGDOM

Until the middle of this century, developments in the provision and financing of health care services in the UK closely resembled trends in many other industrialized nations. Health services had been developed by a mix of mostly private and charitable initiatives, supplemented by increasing public involvement originating in the Poor Law workhouses of the previous century. As elsewhere, there was a gradual increase in the proportion of health expenditures accounted for by public spending during the first few decades (Table D-1). As in much of continental Europe, there was also a system of work-based medical insurance, National Health Insurance (NHI), which had been legislated for by statute from 1911.

NHI involved compulsory contributions and covered mostly the manual workforce, coverage gradually being extended until it reached 43 per cent of the total population by 1938 (Gray, 1991). Contributions were made to a large number of approved private insurance schemes, which displayed an enormous variation in their benefit schedules and memberships. Over time there was a gradual process of rationalization and concentration, and the total number of insurance schemes fell. NHI did not cover hospital services but paid for ambulatory services provided by approved general practitioners (GPs), who were paid mostly on the basis of capitation fees. Besides the statutory insurance schemes, there were a number of provident schemes that covered the middle classes, as well as a number of hospital contributory schemes.

However, in 1948 the country's health care arrangements changed radically, with the institution of the National Health Service (NHS). NHS not only took over the running of most of the country's health services, but also replaced the existing financing arrangements with a centralized tax-based system that provided care essentially free at the point of delivery to the whole population. NHI-type schemes disappeared, while the number of provident schemes contracted significantly and many of the latter schemes were amalgamated into the British United Provident Association (BUPA).

Since 1948, the financing and provision of health care have both been predominantly public, and the role of the private sector has remained marginal. Official policy on the private sector has varied from time to time, but the general stance has been one of non-interference and occasionally of discouragement. Despite this, growth in the private sector has increased in recent years. While this has coincided with a period of government by the Conservative Party, marked by much greater encouragement of private sector activity in virtually all economic spheres, this growth appears to be much more driven by demand than a consequence of official policy.

Table D-1: Total Health Expenditures, 1920-1938			
Year	Total Expenditures	Private/Public Mix	
	% of GNP	% Private	% Public
1920	1.74	54	46
1921	2.24	49	51
1922	2.51	49	51
1923	2.45	50	50
1924	2.44	49	51
1925	2.46	48	52
1926	2.69	46	54
1927	2.60	44	56
1928	2.66	45	55
1929	2.68	44	56
1930	2.89	43	57
1931	3.21	43	57
1932	3.35	44	56
1933	3.28	45	55
1934	3.18	45	55
1935	3.14	45	55
1936	3.15	45	55
1937	3.20	44	56
1938	3.29	43	57
Source: Gray (1991)			

## THE PRIVATE HEALTH CARE SECTOR

The right of physicians in the NHS to private practice was granted at its inception. In part, this was done to limit the development of an independent private hospital sector, and this was of some success until the 1980s, as the overwhelming majority of private inpatient services were carried out in NHS "paybeds." These were separate beds maintained in NHS hospitals for patients who wished to pay privately for their care. They numbered about 5,000 until the mid-1970s. Similarly, the majority of private outpatient visits were taken care of by the NHS. While some private hospitals and clinics did exist, attending physicians were almost always employed part-time within the NHS. Services were paid for out-of-pocket or, in most cases, by medical insurance. The latter was provided mostly by nonprofit insurance societies.

The private sector concentrates mostly on inpatient surgical treatment, and even then mostly on elective procedures. Services are usually specialty in nature, and there is no private provision of general primary care treatment.

## TRENDS IN PRIVATE HEALTH INSURANCE, 1950 ONWARDS

Since most expenditures in the private sector are paid for by medical insurance, the best indicator of growth in the sector is data from the private insurance societies (Table D-2). These show that enrollment increased steadily from 1950 to 1975, before declining until 1979, when it started to increase rapidly, before resuming a slower but steadier rate of growth in 1981 (Grant, 1985; Vayda, 1989). This last and current period of growth is at a much higher rate than the historical trend rate. In the period up to 1980, the growth in private insurance and real incomes was important in that this growth helps explain changes in the demand for private health care.

Over time, two determinants seem to have influenced the growth in private insurance: income and economic development via their influence on demand, and the price of insurance premiums. In the period up to 1975, three factors played a role. First, the number of employers paying for group schemes covering their employees grew. These schemes were generally viewed as being tax-efficient methods of worker compensation, although it must be noted that such schemes were a benefit which was, and to some extent still is, limited to senior professional and managerial staff. In more recent years, as coverage has spread, competitive pressures—the need to have a scheme because everyone else has—have become the most important motivation for employers (Grant, 1985, 72). Second, restrictions were in force up to 1966 on the level of surgical fees, which helped keep premiums down. Paradoxically, these were introduced with the aim of reducing private sector activity but, because of their effect on prices for private health care, may have had the opposite, unintended effect. Finally, there were underlying social changes, which included growing disenchantment with the services provided by the NHS.

TABLE D-2: UK Private Health Insurance Coverage (BUPA, PPP and WPA only)		
YEAR	SUBSCRIBERS	PERSONS INSURED
	('000)	('000)
1955	274	585
1960	467	995
1965	680	1,445
1970	930	1,982
1975	1,087	2,315
1980	1,635	3,601
1991	3,200	6,500
Source: Grant (1985) and Pike (1992)		

In the late 1970s, growth faltered. During this time, tax exemptions on insurance premiums were abolished and inflation was generally high, both of which forced the price of health insurance to escalate. The severe recession in the mid-1970s also would have dampened demand. Growth in insurance coverage resumed in 1979, partly because the underlying demand for insurance increased. Growth in the 1980s was faster than was historically the case, which can be explained by the improved rate of income growth in the UK economy during this time, as well as changes in the supply of private hospital services. At the end of the decade growth faltered again, with the number of insurance subscribers falling 0.6 per cent in 1991; this fall was largely due to the effects of recession on income and company profits. Price also played a part as the slowed expansion in private insurance has been associated with an increasing problem of cost escalation, and thus rising premiums. As insurance coverage has expanded, the proportion of private hospital income paid for by insurance has risen from 60 per cent to 75 per cent (Table D-3). Historically, UK insurers were not particularly concerned about cost escalation, but recent developments have forced them to begin to take a greater interest in cost containment (Pike, 1992).



<b>TABLE D-3: Percentage of Private Acute Hospitals' Accounts Settled by Patients and Insurance Companies</b>				
	<b>1975</b>	<b>1980</b>	<b>1982</b>	<b>1984</b>
<b>PATIENTS</b>	40	32	28	25
<b>INSURANCE</b>	60	68	72	75
<i>Source: Grant (1985, 65)</i>				

#### TRENDS IN THE SUPPLY OF PRIVATE HOSPITAL SERVICES, 1950 ONWARDS

For a large part of the history of the NHS, much of the political debate over private services has revolved around the existence of paybeds in the NHS, which have traditionally provided the bulk of private inpatient care in the UK. Much of this debate has been ideological, reflecting each party's general attitude to the very legitimacy of private health care. But until the 1970s, this debate was low-key and did not directly effect the status of these beds. A reduction in their number from 5 per cent to 1 per cent of total NHS capacity in 1966 was carried out by a health minister belonging to the right-of-center Conservative Party solely because of low bed occupancy. Otherwise, growth in the number of private hospital beds in the country was gradual.

However, in 1974 a more ideologically committed left-of-center Labour government took office, with a strong desire to reduce the level of private health care. Although it was forced to compromise with the powerful medical profession in the extent of actual changes, a decision was made to slowly phase out NHS paybeds. In retrospect this policy, legislated under the 1976 Health Services Act, proved to be misguided and based on faulty analysis, because while it sought to severely reduce the provision of private care in public hospitals, it officially legitimized the existence of an independent private sector as well as placing no controls on its activity. This was ultimately to encourage the rapid expansion of non-NHS private hospital facilities. The existence of a large number of subsidized NHS paybeds had hitherto acted as a competitive constraint on the development of private facilities. Since there was no direct attempt to reduce demand for private health services, the reduction in the supply of paybeds encouraged the private sector to expand the provision of independently run private beds. Because of the lead time involved in hospital construction, this did not result in an increasing supply until 1979 (Table D-4).

<b>TABLE D-4: NHS Paybeds and Acute Care Beds in Private Hospitals</b>		
<b>Year</b>	<b>NHS Paybeds</b>	<b>Private Beds</b>
1974	5,334	NA
1975	4,845	NA
1976	4,822	NA
1977	3,859	NA
1978	3,978	4,000
1979	4,073	4,295
1980	3,450	5,000
1981	2,968	5,302
1982	3,222	6,100
1983	3,293	6,913
1984	NA	8,643
<i>Source:</i> Grant (1985)		

Although a new Conservative government in 1979 did not attempt to expand the number of paybeds, it did reverse the policy of phasing them out. More importantly, it sought to reduce the level of subsidy to the beds by requiring that the amount of cost recovery be increased and that charges include some element to cover capital depreciation. This only improved the potential profitability of private investment in private facilities.

The 1980s saw a rapid demand-led expansion in the independent private hospital sector. This was facilitated by improvements in the supply of two inputs—capital and labor. Historically, the bulk of private hospital beds was run by charitable or nonprofit institutions, but the 1980s saw the entry of a number of commercial, for-profit operators, including some foreign investors from the United States and the Middle East. The supply of non-institutional investment was also encouraged by tax relief on equity investments in unquoted companies, which led many NHS specialists to form and invest in their own small community hospitals. The structure of the independent hospital sector thus changed, with an increasing proportion made up of for-profit commercial entities. The supply of labor (i.e., doctor availability) was improved by changes in the contractual arrangements of NHS specialists, which made it easier for them to opt for part-time contracts with the NHS, allowing them to maximize their private earnings. Growth in the private hospital sector

faltered in the late 1980s, as a result of over-expansion, reflected in falling occupancy rates, but this must be seen as merely a temporary adjustment.

## PRIMARY HEALTH CARE

Any analysis of private health care in the UK must restrict itself to the hospital sector, as there is no significant private provision of primary care. This is perhaps unusual, but stems from several reasons. First, the price for the individual is prohibitively high (insurance coverage is not available), in comparison with the virtually free service already provided by NHS-employed GPs. This is unlikely to be resolved by expanded insurance coverage, as the probability of consulting with a GP is high (approximately four times a year) and the cost per visit relatively low. Second, unlike in the case of NHS hospitals, there are no queues for provision that could encourage individuals to pay for faster treatment. Even if individual GPs wished to promote private practice, they have little incentive to do so in view of the low level of consumer demand, and the restrictions preventing them from charging referral fees and on individual patients being treated under both the NHS and privately by the same doctor (Grant, 1985, 58-59).

## FUTURE PROSPECTS

Over the long run, demand for private hospital care and private insurance, despite free NHS services, has been maintained by various motivations by consumers: the ability to choose the time of admission into hospital; the freer choice of a specialist; privacy when in the hospital; and, to a lesser extent, status symbolism, ideological support for private medicine, and a perception that private treatment is technically superior (Grant, 1985, 71). To some extent it can be argued that this ultimately reflects the relatively low allocation of GDP spent on publicly provided health services in relation to demand. However, in the longer term there has been slow but nevertheless steady growth in the demand for private services, despite increasing public expenditures on health. In addition, there is little correlation between the demand for private health care and the supply of NHS services locally. Demand is highest in London and the South East, which also have the highest level of NHS provision. In fact, use of private health care and insurance coverage is closely correlated with social class and income. The long-term growth of the private sector thus can be seen as reflecting long-term changes in the social attitudes, associated with the change from the largely working-class society of 1950 to the affluent consumer society of the 1990s (Day and Klein, 1989). This has led to an increasing demand for consumer control over the timing of an operation, who does the operation, and the physical environment; and such control has not traditionally been available under the NHS.

How these trends will affect the private health care sector in the future is difficult to determine at this point, owing to the major reorganization of NHS since 1989, which has attempted to introduce competitive internal markets into the service. This has been coupled with considerable decentralization of management, and setting up of autonomous, self-governing units to run hospital services. The intention of much of this is to increase the responsiveness to consumers of NHS facilities. While some of these changes may increase public sector competitiveness with respect to the private sector, other changes may

make it easier for public financing to flow to private providers. In the context of the new division between financing and provision, blurring of the distinctions between private and public providers is likely to increase. In the longer run, therefore, distinguishing between the private and public sectors in the UK may become purely an academic exercise.

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